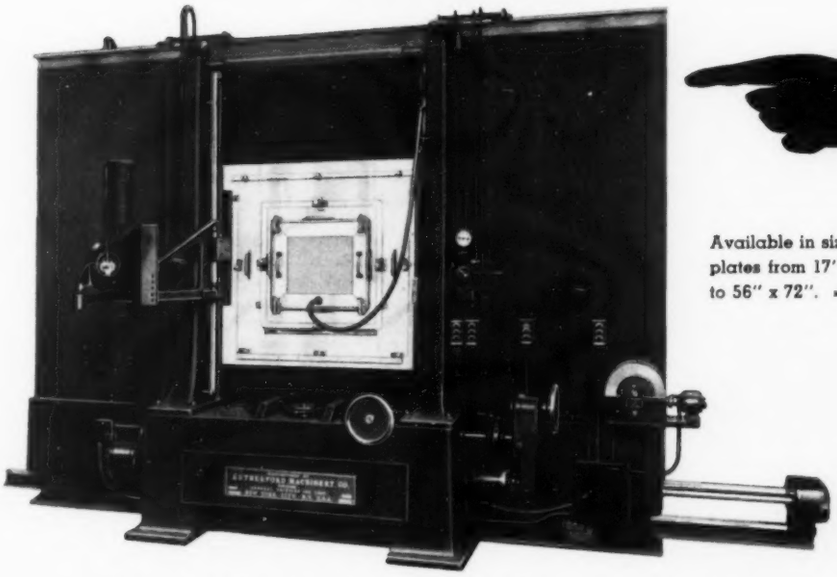
MODERN LITHOGRAPHY

JULY • 1940 • VOL. 8 • NO. 7

Rutherford

PRECISION PHOTO COMPOSING MACHINE



Available in sizes for plates from 17" x 22" to 56" x 72". » » »

This machine will produce images from negatives or positives on offset printing plates, duplicating one or several subjects as many times as required, all accurately positioned to hair-line register in predetermined location on any part or entire surface of press plate. Send for descriptive folder. » » »

THIS MACHINE WILL LOWER YOUR PLATE MAKING COSTS

RUTHERFORD MACHINERY CO.

DIVISION » GENERAL PRINTING INK CORPORATION

Main Office » 100 SIXTH AVENUE » NEW YORK

608 So. Dearborn St. Chicago, Ill. | 1425 Folsom St. San Francisco, Cal. | 920 St. Sophie Lane Montreal, Que. | 176 John St. Toronto, Ont.

SENEFELDER

LITHOGRAPHIC SUPPLIES

Everything to make the job easier

Each month we will briefly describe an outstanding item in the Senefelder group of supplies for the lithographer.

CELLULOSE CLEANING PAPER

Many deep-etched, or photo-composed plates are spoiled by the use of improper wiping materials while being processed. Lithography, especially the processing of the plate, is a chemical process and no impure materials may be used in any chemical process.

The ideal and most efficient wiping material available for use on photo-composed plates is Cellulose Cleaning Paper which is a chemically pure product, absolutely clean, highly absorbent, extremely soft in texture and sufficiently low in price so that it need only be used once. Cellulose Cleaning Paper which is chemically pure does not affect any chemical solutions; it is bleached pure white and this makes it possible to detect whether or not a plate has been wiped perfectly clean.

Cellulose Cleaning Paper has excellent absorbing properties; it removes the last particle of chemical solutions from the plate without leaving any residue behind and without harming the most delicate dot of the printing image. Cellulose Cleaning Paper is made in three-ply pads size 12 x 20" and these pads are embossed with a corduroy pattern; in this form the paper is very convenient to handle and gives perfect results in cleaning.

Cellulose Cleaning Paper is always ready for use without spoilage of material and without waste of time. It should be stored in a dry, dust-free room, properly wrapped.

Write for leaflet No. 183 describing characteristics of Cellulose Cleaning Paper, prices, etc.

The Senefelder Company, Inc.

"Everything for Lithography"

32-34 GREENE ST. NEW YORK, N. Y.

Absorbent Cotton
Acids, Litho
Acid Brushes
Alum Powder
Aluminum Plates
Antifin Rubber Preserver
Asphaltum Liquid
Asphaltum Powder
Berlin Paper
Bronze Powders
Bronzing Pads
Carborundum Powder
Caustic Soda
Cellulose Cleaning Paper
Charcoal Sticks
Chemicals, Litho
China Marbles
Cold Top Enamel
Collodion Emulsion
Columbia Paper
Copierlack
Cornelin Solution
Correction Slips
Counter Etch "Convenient"
Crayon Holders
Crayon Ink
Crayon Pencils
Crayon Transfer Paper
Crayons, Litho
Deep Etch Supplies
Developing Ink
Double Etch Salt
Duralac Lacquer
Egg Albumen
Engrav. Needles
Engrav. Stones
Etches
Excelsior Paper
Felt Daubers
Film Filters
Flannel, Litho
Flint, Graining
Fly Cord
Fountain Etch
French Chalk
Gamburger Slips
Gelatine Foils
Glass Marbles
Glycerine
Graining Marbles
Graining Quartz
Gum Arabic
Hand Rollers
Hydroquinone
Impression Rubber Sheeting
India Paper
Ink Mullers
Ink Knives
Ink Slabs
Liquid Tusche
Litho Inks
Litho Stones
Lump Pumice
Magnesia Carb.
Maple Balls
Mica Powder
Moleskin
Molleton
Mutton Tallow
Negative Brushes
Negative Collodion
Negative Glass
Negative Varnish
Neg-O-Lac
Nitric Acid
Offset Blankets
Offset Inks
Offset Powder
Opeque
Palm Oil
Pens, Litho
pH Slide Comparators
Photographic Gelatine
Planium Etch Salt
Plates, Lithographic
Press Boards
Printing Inks
Process Glue
Process Oil
Proofing Inks
Pumice Powder
Quartz, Graining
Rolling-up Ink
Rosin Powder
Rubber Snake Slips
Rubbing Stones
Schumacher Slips
Scotch Hone
Scotch Slips
Scotch Tape
Scraper Leather
Scraperwood
Senebumen
Senelac Varnish
Sensitizers
Sharp Etch
Snake Slips
Soapstone
Sponges
Steel Balls
Steelclay Marbles
Stone Cement
Strecker Salt
Sulphur Flour
Tracing Blue
Tracing Paper
Transfer Ink
Transfer Papers
Transparency Solution
Tusche
Varnishes
Wire Brushes
Zinc Plates
Etc., Etc.

MODERN LITHOGRAPHY

LITHOGRAPHED IN THE INTERESTS OF LITHOGRAPHERS EVERYWHERE

THE COVER

New York City, now nursing along for the second consecutive year a World's Fair, is still the nation's most popular mecca for summer tourists. A summer resort of concrete and steel, it offers more per square mile to the vacationer than anywhere else in the world. Here advertising, publishing and the graphic arts flourish in a world made to order. Photo by Ewing-Galloway.

July, 1940

Volume 8 Number 7

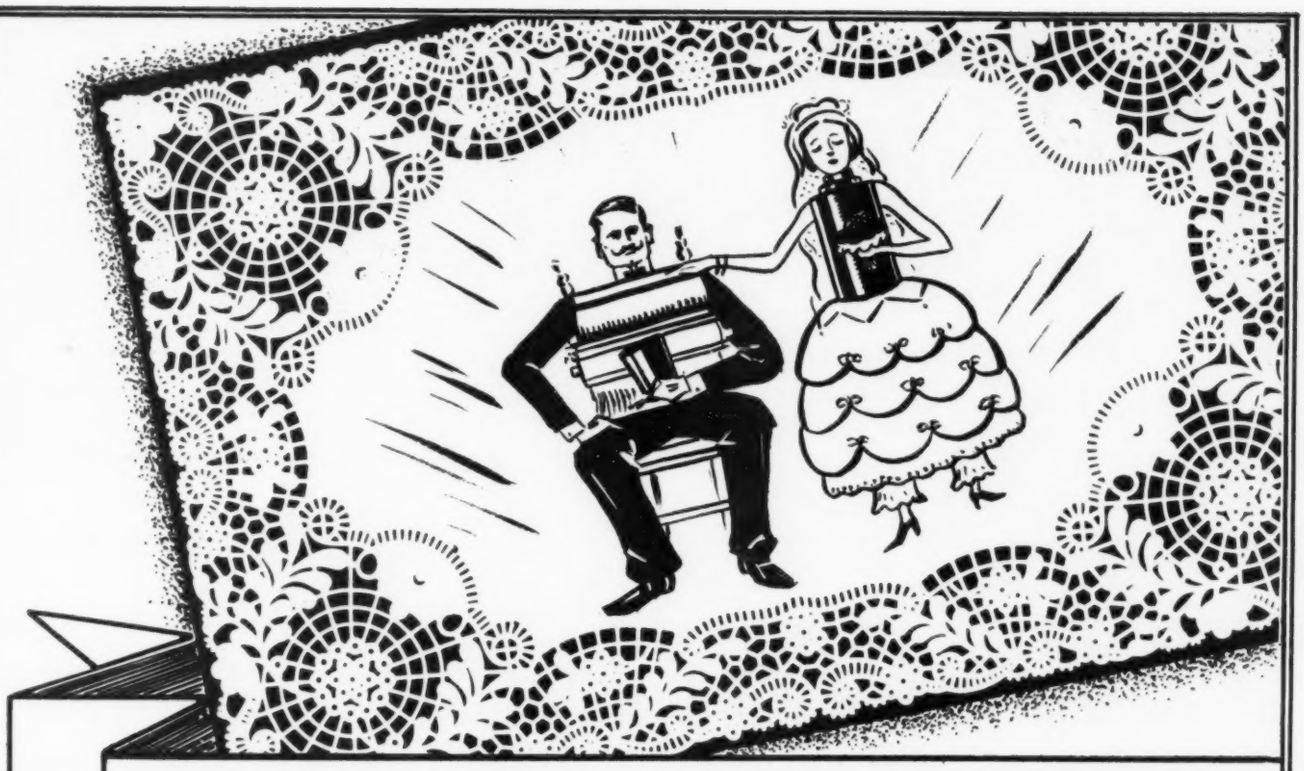
Without question the Eastern Lithographers' Association deserves a whale of credit for the ambitious and highly successful promotional job it sponsored in distributing complimentary copies of Litho Media to some 1200 advertisers in and around New York City. Catching the contagious enthusiasm of the indefatigable Roger Stephens, who first conceived the idea of Litho Media and had the audacity to go through with it, the Easterners lined up lithographers and lithographic suppliers alike for financial backing and support. Today the first evidences of that support are pouring in in the form of letters from the grateful and fortunate persons who were presented with copies. The replies are both refreshing and promising, refreshing because they show that Litho Media is liked and appreciated, and promising because they indicate what an even brighter future for the industry lies ahead when it decides to come out from beneath the bushel permanently. But judge for yourself. Read Robert P. Inglis' interesting article, "Litho Media Polls Buyer-Reaction," on page 16 of this issue.

WHAT YOU WILL FIND IN THIS ISSUE

MODERN LITHOGRAPHY

Reg. U. S. Pat. Office

GRANT A. DORLAND, *President;* IRA P. MACNAIR, *Vice-President;* WAYNE E. DORLAND, *Secretary-Treasurer;* RICHARD ROLEY, *Editor;* SAMUEL D. WOLFF, *Advertising Manager.* Official Organ of the National Association of Photo-Lithographers. Published monthly on the 15th by The Photo-Lithographer, Inc., at 254 W. 31st St., New York, N. Y. ADVERTISING RATES: Advertising rates made known on application. Closing date for copy—20th of the month previous to date of issue. SUBSCRIPTION RATES: $3.00 per year in the United States, $4.00 per year in Canada. Single copies, 30 cents. Entered as second class matter, Dec. 29, 1939, at the Post Office at New York, N. Y., under the Act of March 3, 1879.



THEY'RE BACK TOGETHER AGAIN

THE LEATHER ROLLER AND THE OFFSET PRESS

Here is one of the best offset romances of recent years! The old-time leather roller is again "keeping company" with the offset press. And it's one "Lavender-and-Old-Lace" scheme that means better days for both. There has always been a feeling that nothing can take the place of the smooth leather roller as a litho accessory, and the recent "swing" back proves it.

And what about results? Millions and millions of magnificent sheets are the last proof. Ask any progressive lithographer and he will tell you. He'll step right up and admit that he'd like at least one good smooth leather roller riding the form, so let the romance progress . . . By the way—Roberts & Porter is also the house of supply for many other good products for lithography. Every supply; every need; and great service from a great House. Call us.

ROBERTS & PORTER

INCORPORATED

ESTABLISHED IN THE LITHO SUPPLY BUSINESS OVER FORTY YEARS

New York: 100 Lafayette St., Phone: CAnal 6-1646
Chicago: 402 S. Market St., Phone: WABash 6935

Canadian Representative: The Canadian Fine Color Co., 240 Logan Ave., Toronto, Canada

Winning Friends Everywhere!

Tufhide

THE LATEST IN METAL LITHO INKS

1. Unusual Flexibility
2. Fast Drying
3. Hard Drying
4. Easy Running
5. Wet Varnishing

Our nearest plant will be pleased to arrange for a trial demonstration

Sinclair and Valentine Co.

MAIN OFFICE AND FACTORY: 611 WEST 129th STREET, NEW YORK, N. Y.

Albany	Boston	Dallas	Jacksonville	Los Angeles	Nashville	Philadelphia
Baltimore	Chicago	Dayton	Kansas City	Manila	New Haven	San Francisco
Birmingham	Cleveland	Havana		Miami	New Orleans	Seattle

Positively **MUST** READING

Relax.

Go to the seashore. Go to the mountains. Go to the country. Take a trip. It's mid-summer, and it'll soon be dog days and everyone needs a vacation once a year. So relax. Take it easy. Everything'll be taken care of while you're away. We'll keep you posted on what's happening in your favorite industry. Modern Lithography reports the news of the industry every month, describes the latest technical developments, keeps abreast of the markets, watches for new trends, pricks a listening ear and fixes a sharp eye on everything inside and outside the industry that is important, significant, essential and worthy of your notice.

So take it easy. Go somewhere. We'll keep tabs on everything. When you come back, if you've read Modern Lithography each month, given each issue the old cover-to-cover treatment, you'll find you haven't missed a thing. Just one precaution: Make sure before you go that you've renewed your subscription. Just fill out the coupon and make sure you receive your copy of Modern Lithography every month. Don't miss an issue. It's positively must reading.

MODERN LITHOGRAPHY
254 West 31st St. New York City

Send me MODERN LITHOGRAPHY every month for a year. Mail me invoice for $3.00 to cover — Foreign and Canada $4.00.

Name .....

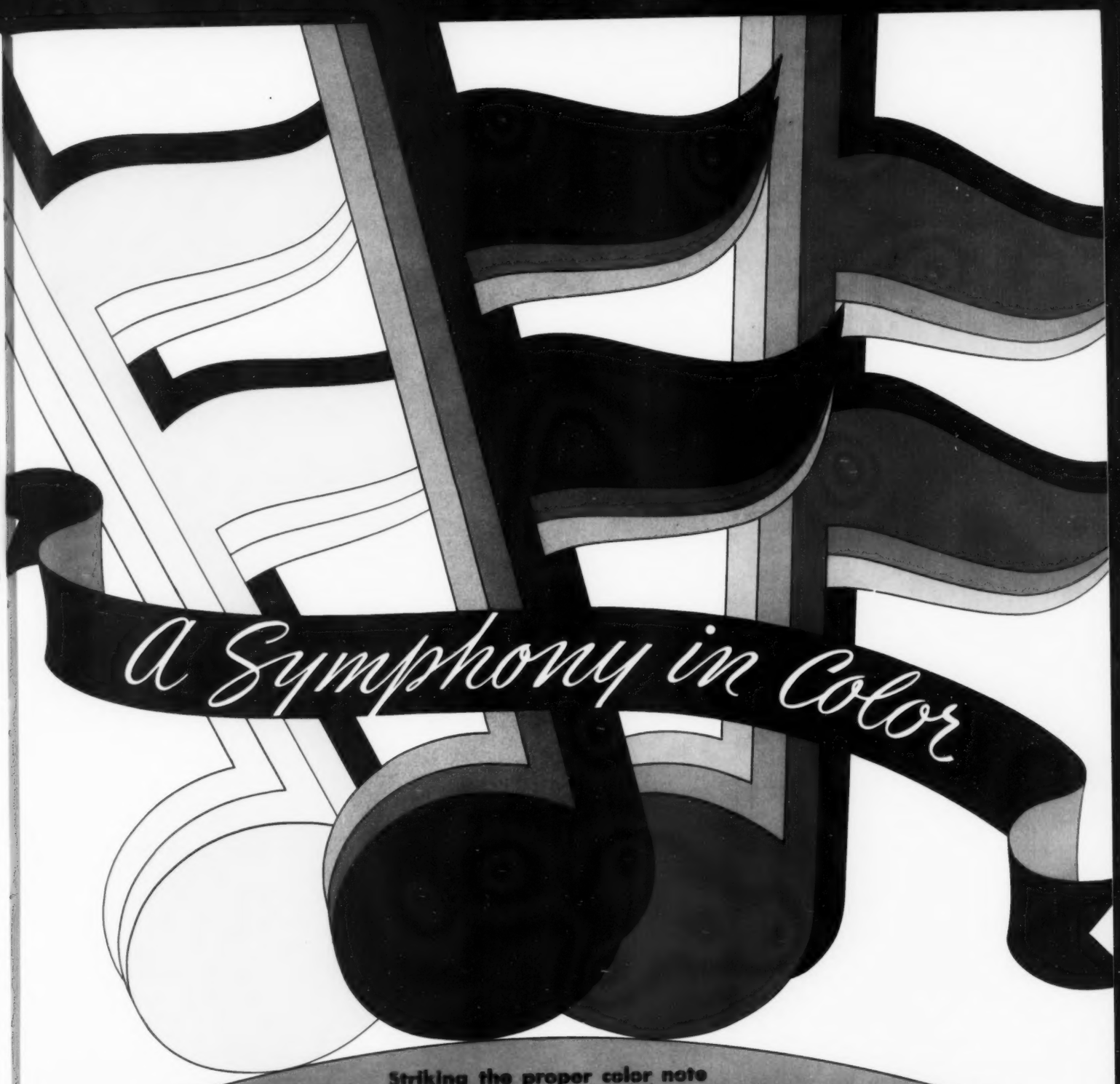
Company .....

Address .....

City ..... **Country** .....

Type of Business ..... **Position** .....

KEEP POSTED WITH MODERN LITHOGRAPHY



Striking the proper color note is one of our accomplishments. We constantly strive for complete harmony between the lithographer and ourselves by conducting constant research in our laboratory and by producing compositions in ink manufacture which are bound to elicit lyrical praise from pressrooms.

THE FUCHS & LANG MFG. COMPANY

(ESTABLISHED 1870)

DIVISION · GENERAL PRINTING INK CORPORATION

100 SIXTH AVENUE · NEW YORK

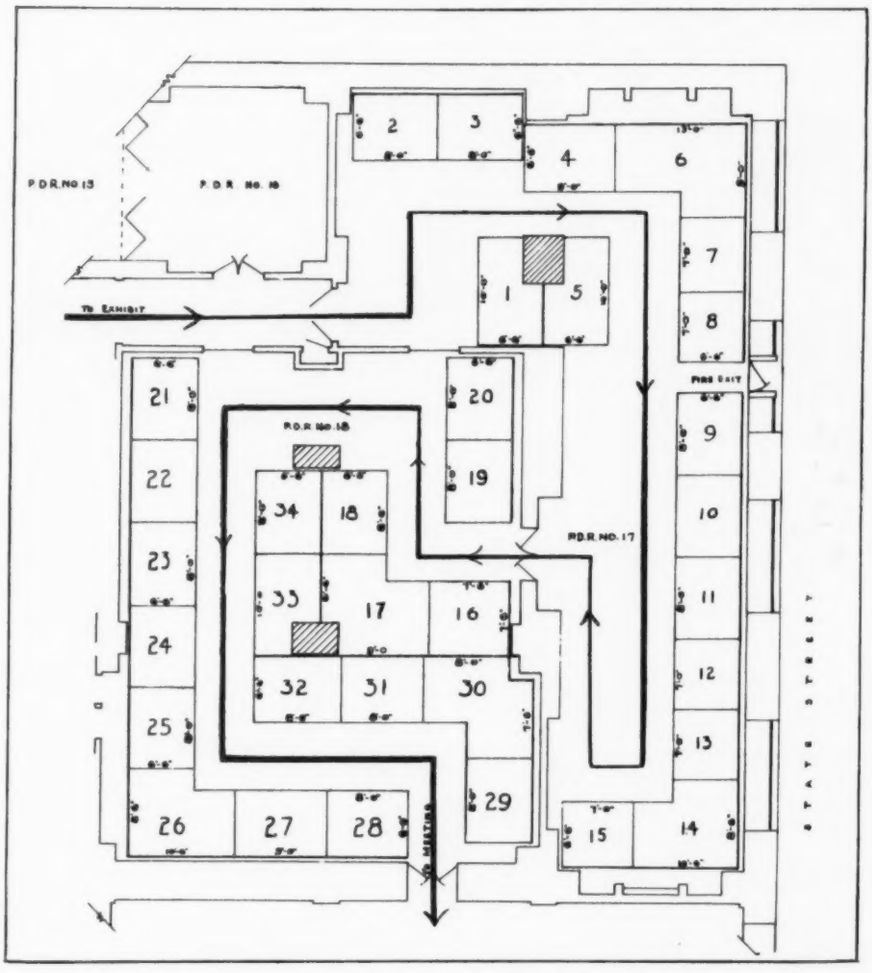
BOSTON CHICAGO CINCINNATI CLEVELAND PHILADELPHIA ST. LOUIS
SAN FRANCISCO FORT WORTH LOS ANGELES TORONTO, CANADA

ENCORE YELLOW | MELODY RED | RHAPSODY BLUE | MASTERPIECE BLACK


Ever since the
stone age
&
Everything for
the Lithographer

Increase Your Sales

by exhibiting your wares at the Eighth Annual Convention of the National Association of Photo-Lithographers, Palmer House, Chicago, Ill., September 26th, 27th and 28th, 1940. Reservations already made for exhibit space are shown below. The floor plan show anticipates that all of the guests to the convention will have to pass through the exhibit rooms in order to go into the convention sessions.



EXHIBITORS WHO HAVE ALREADY RESERVED SPACE INCLUDE:

Agfa Ansco Corp.
American Type Founders Sales Corp.
Russell Ernest Baum
Sam'l Bingham's Son Mfg. Co.
Ralph C. Coxhead Corp.
Dayton Rubber Mfg. Co.
Eastman Kodak Co.
(two units)

Fuchs & Lang Manufacturing Co.
Div. General Printing Ink Corp.
Godfrey Roller Co.
Hammer Dry Plate & Film Co., Inc.
Harris-Seybold-Potter Co.
Philip A. Hunt Company
Ideal Roller & Mfg. Co.
Litho Chemical & Supply Co.
Mallinckrodt Chemical Works
Merck & Co., Inc.

Norman-Willets Co.
Harold M. Pitman Co.
Rapid Roller Co.
(two units)
Rutherford Machinery Co.,
Div. General Printing Ink Corp.
Sinclair & Valentine Co.
Vandercook & Sons
(two units)

For further information write

NATIONAL ASSOCIATION OF PHOTO-LITHOGRAPHERS

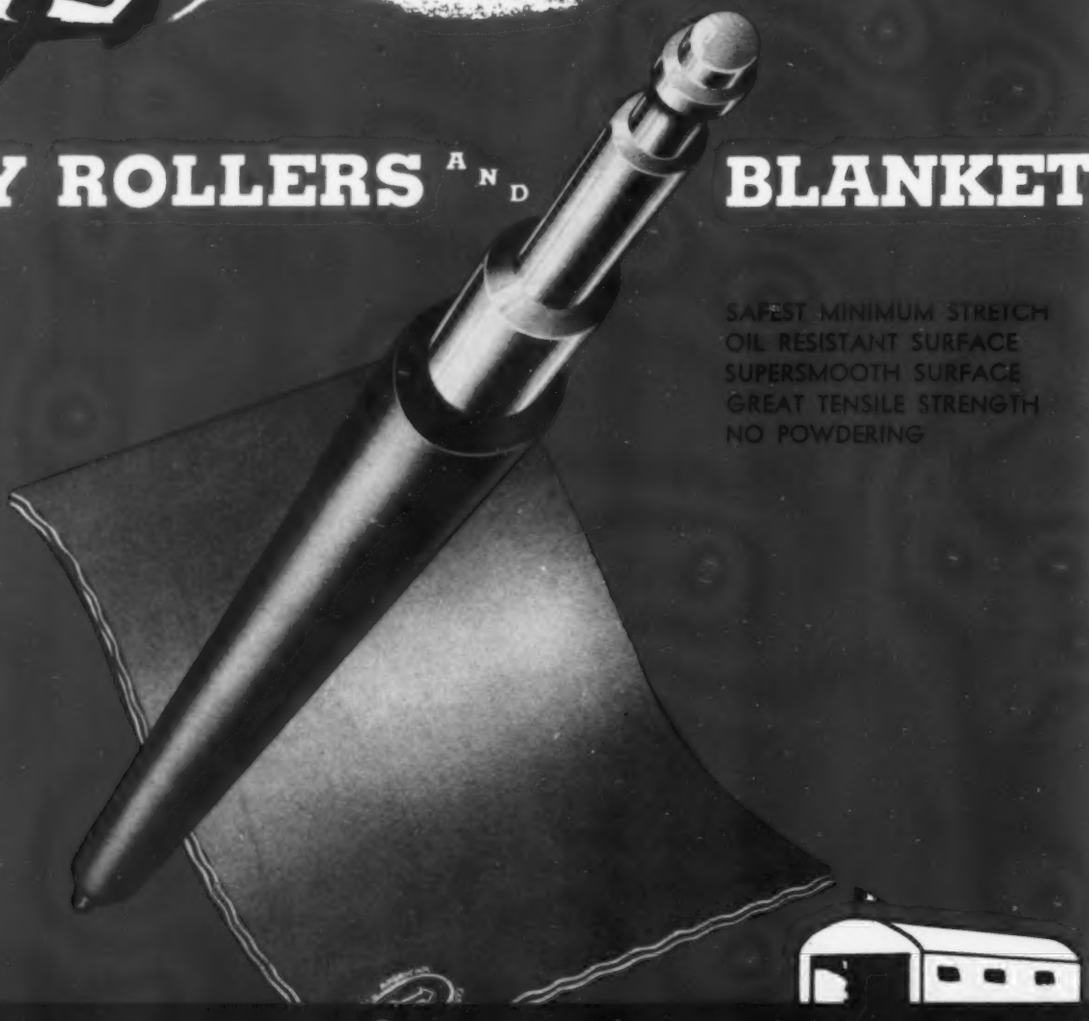
1776 BROADWAY NEW YORK, N. Y.

They High Quality

MERCURY ROLLERS AND BLANKETS

DURABILITY
CONCENTRICITY
ECONOMICAL
EASILY WASHED
UNIFORMITY OF CONTACT

SAFEST MINIMUM STRETCH
OIL RESISTANT SURFACE
SUPERSMOOTH SURFACE
GREAT TENSILE STRENGTH
NO POWDERING



RAPID ROLLER COMPANY

D. M. RAPPORT, *President* • FEDERAL AT 26th STREETS, CHICAGO

EDITORIALS

THE plans now being made for an all-industry exhibition of "living lithography" during the month of October, at Philadelphia, under the joint sponsorship of the Lithographers' National Association and the Philadelphia Art Alliance, should receive the enthusiastic support of the entire industry, lithographer, equipment and supply manufacturer alike. Its objectives, which in the words of the sponsors will be "to honor the tremendous recent strides made by lithography as a commercial technique, to foreshadow its future development, technically and artistically; and to provide for the general public, for the lithographic industry and for its clientele, a comprehensive view of recent accomplishments in the field in a way that will effectively dramatize these accomplishments and bring them to the broadest public notice," are eminently worthy and inspiring. Here is offered an unparalleled opportunity for the industry to promote itself, to establish closer relations with the advertising and publishing worlds and with the general public. Here is offered a golden opportunity for the industry to dispel some of the appalling ignorance and misinformation regarding the lithographic process which has been allowed to accumulate, like mildew, on its front doorstep. Here is offered a gratifying opportunity for chagrining and silencing—though the latter is probably too much to hope for—the moss-backed few who still captiously refer to offset lithography as a "substitute" printing process.

We like the intentions of the exhibit's sponsors with respect to the attention to be paid the history of lithography at the exhibition. "Attention will, of course, be given to the history and tradition of lithography," they announce, "but the major emphasis will be laid upon the accomplishments of modern, American, living lithography." With that policy Senefelder himself would be in complete accord. He was an actor with an actor's instinct for proper dramatic values, and the one outstanding, dramatic thing about the lithographic industry is, not its early beginnings and fine traditions, but the "living" lithographed product rolling off its presses in an ever-increasing flow today, tomorrow and next month.

So, let's set aside next October as "Living Lithography Month" throughout the width and breadth of the industry, and let's give it the widest possible publicity,—use it as the central theme in our advertising, on our letterheads, in direct mail folders, posters, etc. This exhibition has greater promotional possibilities than anything that's come down the lithographic pike in a 'coon's age—or ever. Let's get solidly behind it!

FROM a keen student of credit and price conditions in the lithographic industry we heard an interesting observation recently. Facts show, he said, that the price cutter is invariably one who doesn't pay his bills. When a man ceases to pay his bills, he explained, or is slow and doubtful in payment of them, his first tendency is to lower his prices in order, through increased volume, to obtain sufficient money to meet his obligations. It follows, he pointed out, that equipment and supply firms might make a very vital contribution towards a sounder competitive structure in the industry, and help purge the price cutter if they adopted a somewhat more rigid and uniform policy in extending credit. Unwise extension of credit produces unfair competition, he said, in contrast to healthy and free competition based on the efficiency of the lithographing concern.

LITHO MEDIA POLLS BUYER-REACTION

Promotional effort launched by Roger Stephens a year ago adds up the score in questionnaire sent to 1200 advertisers who have received complimentary copies

By ROBERT P. INGLIS

Executive Secretary, Eastern Lithographers Association

IF ROGER STEPHENS, who first conceived the idea of *Litho Media,* and what is vastly more to his credit saw his colossal project through, possessed one-tenth the super ego of the author of *Mein Kampf,* he would this day be making the rounds, and in the very same chair in which he first unfolded his plans for what has since become one of the most widely-heralded promotional efforts in behalf of the lithographic industry, would be saying, "I told you so." For dodge his accusing finger as you will—though right here it should be said that he is the last person on earth to wag a recriminatory finger—the fact remains that there were few who in the beginning gave Mr. Stephens more than a half-hearted nod of approval for his *Litho Media* project.

That, however, is all water under the bridge. If lithographers, trade associations and trade papers in the industry failed at the outset to rally behind Mr. Stephens' gigantic promotional endeavor as they might have, it was only natural: nothing on such a scale had ever been attempted before; it staggered the imagination. Besides, as every one should know by now—it has been shouted from the house tops loudly enough for the past five years—the lithographic industry is allergic to almost any kind of advertising in its behalf. Why? Ask something easy. The old one about the cobbler's children going barefooted is probably as good an answer as any.

Litho Media burst on the lithographic scene about a year ago. Today it can be said, unequivocably, that it has been, still is, and will be for some time to come one of the most fruit-bearing, promising and far-reaching promotional efforts ever to come out of an industry that up to now has been far too self-effacing for its own good. If that is a challenging statement so are the facts which in the past year have been accumulating around *Litho Media.* Because we think those facts are of far-reaching importance to every lithographer and worth repeating, we would like to relate them here.

When *Litho-Media* came out it was bought by many lithographers and used by some salesmen. They were impressed by its size, its elaborate make-up and its list of contributors. They put *Litho Media* to work by using it as an idea file and a selling wedge and by placing it in the hands of buyers for whom the volume was planned. However, since *Litho-Media's* ultimate destination was to *all* important buyers, individual, uncoordinated effort in this direction, valuable as it was, was not sufficient to achieve completely the object for which the book was published. Therefore, Roger Stephens in cooperation with the Eastern Lithographers' Association, with Malcolm McComb as executive secretary, persuaded 73 firms to contribute about $18,000 to a fund which provided for the sending of 1,200 complimentary copies of *Litho-Media* to the largest graphic arts buyers in the Eastern United States.

The Amalgamated Lithographer's Union purchased books for every one of the 54 Locals within the United States and Canada—in addition to which, cash contributions of $250.00 each were made by the International Office and Local No. 1 of New York City. In all—this organization contributed no less than $1,500.00 in cash to this sales-building campaign—ordinarily not considered within its sphere of activity.

Early in April the books were sent out to a list compiled under the direction of Paul West, president of the Association of National Advertisers; Frederick Gamble, executive secretary of the American Association of Advertising Agencies; and L. Rohe Walter, president of the Direct Mail Advertisers Association. Now, four months later, the response to that move is beginning to be known. Letters in abundance are pouring in

The Allen-A Company

BENNINGTON, VERMONT

April 11, 1940

Mr. Roger Stephens
Litho-Media Inc.
330 W. 42nd St.
New York, N.Y.

Dear Sir:

Many thanks for the complimentary copy of Litho Media, which you sent me. As yet I have been able to drop a few cursory glances its way, but they have been sufficient to impress me with the value of the book. I know that I shall enjoy reading it thoroughly and expect to consult its pages often.

Yours very truly,

THE ALLEN-A COMPANY

Kenneth J. Clark

The American Tobacco Company
111 Fifth Avenue
New York

CABLE ADDRESS
POWHATTAN
HOME OFFICE
JERSEY CITY N.J.

PURCHASING DEPARTMENT

April 5, 1940

Mr. Roger Stephens
Litho-Media Incorporated
330 West 42nd Street
New York, New York

Dear Mr. Stephens:

Thank you very much for your letter of the twenty-ninth and also the complimentary copy of Litho Media, which you were so kind to send me.

This is about the finest piece of work I have ever seen put together in book form and I sincerely trust that you have found great success in its preparation and distribution.

With kindest regards always, believe me

Cordially yours,

J. M. Byrne

MD

NATIONAL BROADCASTING COMPANY, INC.
A RADIO CORPORATION OF AMERICA SERVICE
RCA BUILDING · RADIO CITY
NEW YORK, N.Y.

April 17, 1940

Mr Roger Stephens
Litho-Media Inc
330 West 42nd Street
New York N Y

Dear Mr Stephens:

Thanks for your recent letter and the copy of Litho Media which you sent under separate cover.

While I have not had time to read it thoroughly I consider it a great job in demonstrating the sales-building power of lithography, and I am very happy to have a copy of it in my office.

Sincerely yours,

BEN BURK INC.
· DISTILLERS ·

1010 MASSACHUSETTS AVE.
BOSTON MASS.

April 5, 1940.

The Eastern Lithographers Association,
120 Wall Street,
New York City,
New York.

Attention of Mr. D. R. Marean

Gentlemen:

We received the outstandingly beautiful copy of your LITHO MEDIA, which is being sent to our Advertising Department at another office.

I know that these books must be very limited, but, nevertheless, I wonder if it would be possible for you to spare an additional copy.

Yours very truly,

BEN BURK, INC.

Buyer of Printing

...LL I...RPORATED
...K AV... · NEW YORK
...DVE...SING

April 8, 1940

...r Stephens, Publisher
...DIA Inc.
...t 42nd Street
...rk, N. Y.

...r. Stephens:-

...e accept our thanks for the complimentary copy ...tho Media and our congratulations for producing ... fine promotional volume.

...eauty of the format, useful nature of the contents ...he simplicity and clarity of the entire pre-...ation, make it, in the writer's opinion, an ...ressive testimonial to the growing importance of ...ography.

...iously, credit is due to the individuals and ...anizations who had the promotional foresight to ...lan Litho Media.

Sincerely,

...e Butt
...sident

CURTIS FIBRE, SPECIALTY AND COMMERCIAL ENVELOPES

TELEPHONE 7-1175

CURTIS 1000 INC.
FOUNDED IN 1862
PLANTS IN HARTFORD, ST. PAUL AND CLEVELAND
CAPITOL AVENUE AND BROAD STREET
HARTFORD, CONNECTICUT

April 16, 1940

Mr. Roger Stephens, Publisher
Litho-Media Inc.
330 West 42nd Street
New York, N. Y.

Dear Mr. Stephens:

Thank you for the complimentary copy of Litho-Media which you so kindly sent.

You are to be congratulated upon the production of such an interesting and educational presentation. It should prove valuable to all those who were fortunate enough to receive a copy and it undoubtedly will advance the knowledge and understanding of lithographic products immeasurably.

Our copy will be treasured for a long time to come and we appreciate your kindness in sending it.

Yours very truly,

METROPOLITAN LIFE

FREDERICK H. ECK
LEROY A. L...

NEW ...

JAMES L. MADDEN
Third Vice-President

DOUGLAS J. MURPHEY
Advertising

Mr. Roger Stephens,
Litho-Media Inc.,
330 West 42nd Street
New York City.

Dear Mr. Stephens:

Thanks you for send...
expect it to be a ...

Mr. Madden has re...
the book for him ...

giving ample evidence that buyers of lithography regard *Litho Media* not only as a promotion piece but as a volume of sound educational material to be read, studied and to serve as permanent reference. Spurred by this overwhelming response, Mr. Stephens decided to send out a questionnaire to the *entire* list of 1,200, asking for constructive criticism. Although returns are still coming in which indicate that many of the recipients have not yet had an opportunity to go through the book thoroughly, the following compilation should be of interest to lithographers everywhere:

Question: Have you had an opportunity to look over Litho-Media? Yes: 85.6%; No: 14.4%.

Question: If not, do you intend to when you have an opportunity? Yes: 100%; No: 0.00%.

Question: Will it be a permanent part of your business library? Yes: 95.7%; No: 2.6%; Uncertain 1.7%.

Question: How many members of your organization will refer to *Litho-Media* in their work?

76% of the copies distributed will be referred to by 1 to 3 individuals.

24% of the copies distributed will be referred to by 4 to 12 or more individuals.

(This means that each copy of *Litho-Media* will be used on an average by about 3 persons.)

Question: What features or articles have you found most interesting and helpful? 58.2% replied that the entire contents were interesting and helpful to them.

10.1% replied that the exhibits had been most helpful;

8.8% replied that the "Point of Purchase Advertising" article had been most helpful;

5.0% replied that the "Advertising by Direct Mail" article had been most helpful;

3.8% replied that the "The Law and the Advertiser" article had been most helpful;

3.8% replied that the "Color's Effect on a Package" article had been most helpful;

2.5% replied that the "Better Buying and Selling" article had been most helpful;

2.5% replied that the "Offset Lithography's Future" article had been most helpful;

2.5% replied that the "Package Inserts—84 Uses" article had been most helpful;

2.5% replied that the "Window Display Research" article had been most helpful;

2.5% replied that the "Folders Serve Many Purposes" article had been most helpful;

2.5% replied that the "Blowups—Their Production" article had been most helpful;

2.5% replied that the "Principles of Lithography" article had been most helpful;

1.2% replied that the "Mail Advertising Service" article had been most helpful;

1.2% replied that the "And Cabbages and Kings" article had been most helpful;

AMERICAN ASSOCIATION *of* ADVERTISING AGENCIES

EXECUTIVE HEADQUARTERS
420 LEXINGTON AVENUE, NEW YORK

June 17, 1940

Mr. Roger Stephens, Publisher
Litho-Media, Inc.
330 West 42nd Street
New York, N.Y.

Dear Mr. Stephens:

Before he left for the Pacific Coast a few days ago, Mr. Gamble and I talked over our conversations with you.

We are glad to know that you may find it possible to distribute an additional 1,000 copies or so of Litho-Media to advertisers and advertising agencies.

Judging by the reactions of those who were included in your distribution within a 500-mile radius of New York, there is no doubt that the book will be warmly welcomed throughout the rest of the country.

We still consider Litho-Media to be one of the finest industry promotion pieces we have seen and feel sure that it will increase the respect of both agencies and advertisers for the lithographic process.

We have given considerable thought to how the additional copies can be most effectively allocated, and expect to have a suggestion on that point in a day or two.

Yours very truly,

Richard Turnbull

Assistant to the Treasurer

Richard Turnbull/bs

Association of National Advertisers . inc.

330 West 42nd Street, New York

McGRAW-HILL BUILDING

June 3, 1940

Mr. Roger Stephens
President
Litho-Media, Inc.
120 Liberty Street
New York, N. Y.

Dear Mr. Stephens:

I am glad to confirm what I told you in substance at our meeting today.

All the evidence I have seen indicates that the complimentary copies of Litho-Media which you sent out to a portion of our membership with our cooperation were exceptionally well received. Truth to tell, I hadn't expected there would be such a reaction; in fact, our members are naturally sensitive about this sort of thing and I anticipated some adverse comment. I am glad to say there was none. On the contrary, the evidence all points to the fact that the book was not only favorably received but was thoughtfully read and undoubtedly saved in many instances as a reference work. Lithography cannot help but have a better understanding and appreciation among advertisers as a consequence of this and that must be gratifying to you as well as to the industry.

I can now say, without reservation, that our members in the middle west and far west, numbering approximately one hundred, who were not on the mailing list before would appreciate receiving copies as much, and I am inclined to think somewhat more, than those in the east provided you can see your way clear to make them available.

Cordially yours,

Paul B. West
President

Paul B. West
MbF

1.2% replied that the "The Agency Aids Lithography" article had been most helpful;

1.2% replied that the "Send for the Booklet" article had been most helpful;

1.2% replied that the "A Carnival of Color" article had been most helpful;

1.2% replied that the "A New Trend in Road Maps" article had been most helpful;

1.2% replied that the "Litho Technical Foundation" article had been most helpful;

1.2% replied that the "Several Billion Post Cards" article had been most helpful;

1.2% replied that the "Office and Factory Forms" article had been most helpful;

1.2% replied that the "Three Types of Catalogues" article had been most helpful;

1.2% replied that the "Some Customs of the Trade" article had been most helpful;

1.2% replied that the "Data on Sales Presentations" article had been most helpful;

1.2% replied that the "Circulation and Coverage" article had been most helpful;

1.2% replied that the "Planning the Window Display" article had been most helpful;

Question: What additions or omissions would have made *Litho-Media* more helpful to your organization?

47.4% replied that they could think of nothing that would improve the book.

The following are some of the comments made by others:

"Technical information — comparative cost and results against other media — Case histories."

"More exhibits of the work of offset."

"A general discussion on type and its lithographing possibilities. Inks and their usages. Helpful suggestions to those who are not extremely familiar with lithography. How it (offset) can be applied to the newspaper field."

"I would like to have seen some reproductions of Kodachromes, of which this agency has a great deal."

"More information on the mechanics of lithography, guides to efficient and effective results, limitations of the process, and evidence that litho *is not* more expensive than the other printing processes, would have made the volume more valuable to your production-minded readers."

"I'd have discussed technical difficulties that printers have to overcome. I'd include comparative advantages and disadvantages of reproducing from Kodachrome, Carbro, direct color, stained blowups, etc. for specific types of jobs."

"From my viewpoint, I would have liked a little more technical information on lithography, with illustrations of the various equipment used in producing lithography."

Question: Would you have preferred more technical information, specific case histories, or exhibits?

Technical Information

43.5% wanted more technical information; 20.7% did not want more technical information; 35.8% did not answer.

Case Histories

36.7% wanted more case histories; 16.2% did not want more case histories; 47.1% did not answer this section.

Exhibits

42.7% wanted more exhibits; 22.2% did not want more exhibits; 35.1% did not answer this section.

Question: Has *Litho-Media* yet proven of actual value to you and your associates? Yes: 41.6%; No: 31.8%; It will later: 26.6%.

Question: Has *Litho-Media* given you a clearer understanding of the uses of lithography? Yes: 86.6%; No: 10.2%; Not yet: 3.2%.

Question: Do you believe that your organization will use more lithography during the coming year, due to *Litho-Media?* Yes: 39.2%; No: 32.1%; "Possibly or Probably" 28.7%.

CONSIDERABLE space was left on the questionnaire for comments. Over 76.5% were definitely enthusiastic about the book; 10.2% found it of questionable value; 8.1% found the book "interesting", but had sound constructive criticisms to make, and 5.2% thought the book a waste of money.

These comments were more illuminating than any other single section of the questionnaire, and it is a pity that there is not space here to quote them all. The following few quotations give a fair cross-section of the reaction of those answering:

> *"Litho-Media* is one of the most complete books ever published on Lithography. It contains very important information on all printed matter, displays, exhibits, etc. without dealing too specifically with one subject. It covers about all one would want to know when considering printing jobs, and at the same time gives you other manufacturers' sides of the printing story.
>
> *"Litho-Media* has joined our Production Department as an active member, and I know that both the experienced men and the younger men in the business will benefit by this book."
>
> "In the first place—the book commands and demands consideration and perusing from the President—down the line. It is such an imposing work and thereby reflects greatest value to the art itself. The presentation is most admirably done and is of great interest from an educational standpoint."
>
> "I would have liked more technical details and less comment on lithography's possible uses. In saying, 'less comment on its possible uses,' I don't mean that its variety and scope of uses should be omitted, but only less comment on them. I would have liked to have seen production detail emphasized more."
>
> "Our copy is being routed to all advertising and production men. It will be made a part of our standard training course for young advertising men."
>
> "Undoubtedly the finest promotion piece ever gotten out by an industry in the Graphic Arts. The co-operation of various organizations in the same type of business indicates that individual gains are being somewhat subordinated to the welfare of the entire field—this makes for real progress."
>
> "We would not like technical information enough to become lithographers, but enough so we can develop new techniques in using this medium in sales promotion. Of course your broad handling of the whole field was very interesting, well done and well organized. It is a good piece for basic education."

THE reactions to *Litho-Media* clearly indicate that there was a need for the book and that there is need for further promotional efforts along similar lines. Wanted are more examples of fine lithography and more simple technical information that will not only help the buyer plan his work, but give him confidence in lithography as a major reproduction process. Because the process is difficult to explain clearly to a layman, and because there exists a bewildering confusion of trade names, terms and methods, buyers are puzzled by the process.

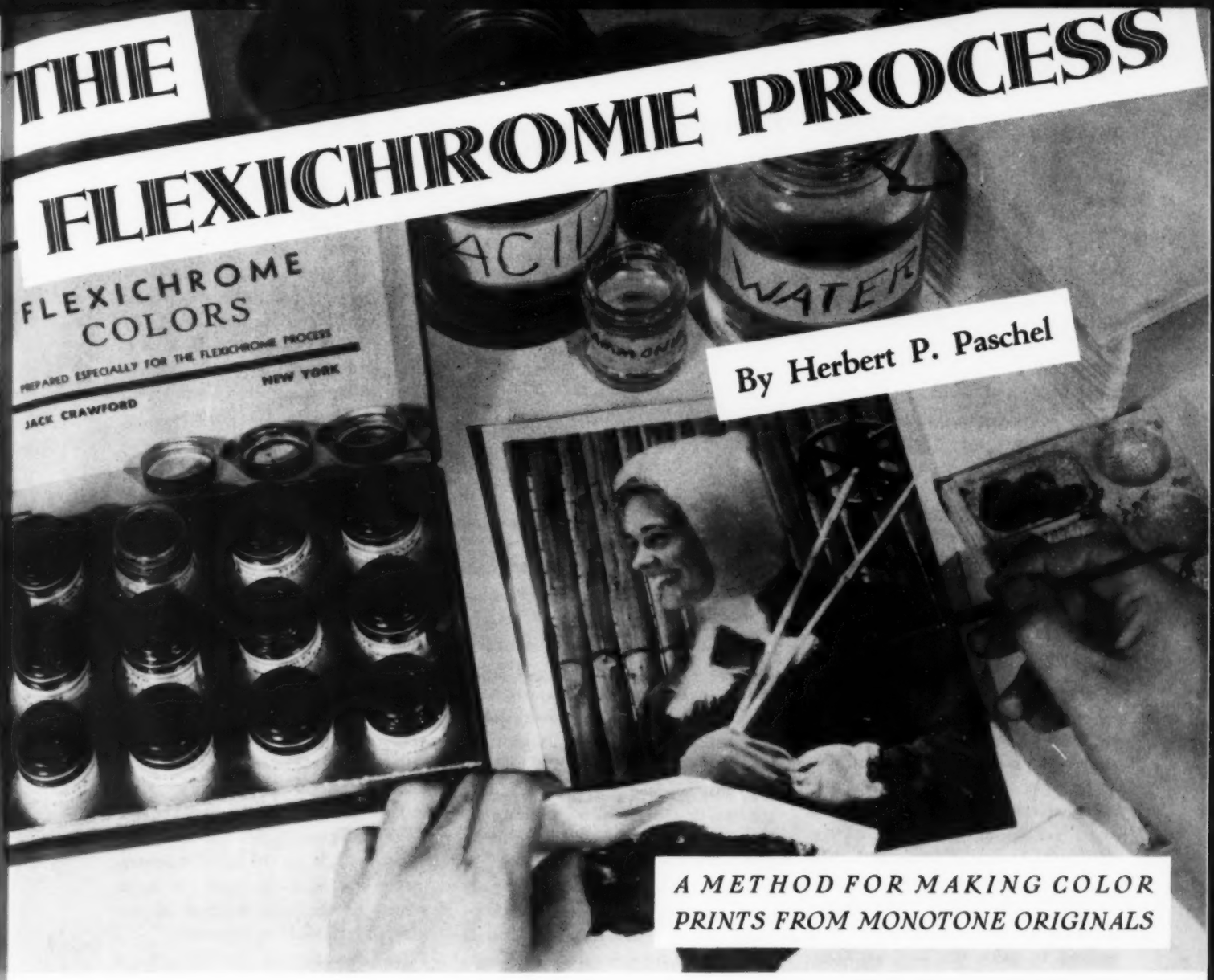
From the sales promotional manager of a nationally known food company comes the following evidence of confusion of names: "We have always used lithography more than offset, due to volume of printing requirements for packaging, displays, etc." How much longer must this continue? When will the industry settle on one name, explain what it covers, and promote it to the exclusion of all other terms and individual designations?

The art director of one of the largest oil companies who shared the book with the production manager says, *"Litho-Media* is a job well done. But let's clear up once and for all the misconceptions re 'deep etch' and 'albumen' plates. Also let's have a clear, complete discussion of lithography on coated stocks. In my experience some lithographers are reluctant to use them —others say their use is no problem."

These troubles (and there was evidence of many more of them throughout the letters and questionnaires) should not be allowed to disturb those who are responsible for purchasing the products of the lithographic industry. Nobody likes to buy a cat in a bag. And so long as buyers understand letterpress better than they understand lithography, they will, when in doubt, buy letterpress.

If every lithographer could read the letters that have come in, could go over each individual reply to the questionnaire, and would calculate the volume of lithography that is or should be purchased by the writers, they would agree that *Litho-Media* has been a very real success. If only a small portion of these buyers who say that they will use more lithography in the coming year because of *Litho-Media* actually do buy more, the cost of the entire promotion will have been paid for many times over.

THE FLEXICHROME PROCESS



By Herbert P. Paschel

A METHOD FOR MAKING COLOR PRINTS FROM MONOTONE ORIGINALS

AMONG recent developments in the field of photography is one which possesses many possibilities in lithographic work. It is worthy of investigation, for with it the lithographer can overcome many of the problems he is likely to confront in color reproduction. This development is the Flexichrome Process, so-called because of its flexibility in the creation of colored originals.

Many advertisers today are using hand-tinted black and white photographs as their color copy. The obstacles that confront the lithographer when attempting to separate such copy need not be reviewed here. Suffice it to say that the underlying silver image makes accurate color separation impossible, thus necessitating exorbitant retouching to achieve a pleasing result. With the Flexichrome Process the creation of colored copy from a monotone original is achieved with greater speed and greater fidelity of color than is possible with black and white paper prints. Of particular interest is the fact that the tone values of the original are converted into color values with the complete absence of the otherwise annoying silver image. Thus, the finished Flexichrome print contains only brilliant dyes without any underlying silver image to degrade the result.

The process is essentially one of manual manipulation depending on sound photographic principles for the transition of black and white tones into color. Flexichrome film is exposed and processed to form a gelatine relief image adhering to a fine-toothed semi-mat surfaced celluloid base. Any good continuous tone negative may be used in making the Flexichrome positive. This positive is then dyed in a special black dye and then backed with a white backing which produces a black and white print hardly distinguishable in appearance from ordinary photographic prints. Flexichrome colors are supplied in complete sets for coloring these prints. The color is applied to local areas with a brush and is immediately absorbed into the gelatine relief selectively according to the depth of the image. The print

responds semi-automatically to this treatment accepting only a certain amount of the color applied to its surface, modifying it with black and white to simulate the appearance of colored objects in light and shade. Highlights will not receive color, and, consequently, always remain clear, while the applied color acts on the black dye within the image like a cutting reducer, replacing the black dye in the light and middle tones before affecting the deeper shadows. The result is a gradual scale of values ranging from black and white through any given hue, the middle tones being brilliant and pure in color.

Any color may be modified, removed, or changed completely to any other color at any time with considerable ease and without upsetting the general scale of values in the picture. Unlike other methods of multiple toning, no blocking or staging with rubber cement is required to protect certain portions of the image from the effects of other toning chemicals. Flexichrome's special colors are non-toxic and all of the colors may be mixed freely with each other to obtain any color of the spectrum. The image dries almost immediately and the operator may proceed to color one area after another as fast as he can work without hesitation. Mistakes in coloring are not serious because the print will continue to respond to the coloring action as long as one cares to work on it. Even if the print appears to be completely ruined, one can always paint black over the whole thing, restoring it to the original black and white print and then start over again. In this way one can color and re-color the print again and again, indefinitely, if necessary, even using a different color scheme each time until the desired result is obtained.

The lithographer is often called upon to make a two-color job from a monotone original. This usually entails making two halftone negatives (or positives) of differing contrast and gradation and affecting solids and drop-outs as well as balanced middle tones by extensive retouching. For work of this type the Flexichrome method is indispensable. A Flexichrome print is made and colored according to the result desired. By using colors that are analogous to the printing inks to be used the lithographer assures himself of facsimile reproduction. By using appropriate two-color filters, two separation halftones may be made, each of which will record its respective color in proper gradation, assuring fidelity of color reproduction with a minimum of handwork. The loss of photographic quality so often associated with "worked-up" color jobs is entirely eliminated by the Flexichrome process.

VERY fast, high-red sensitive negative materials are especially suitable for general use with Flexichrome. In addition to the advantage of speed these negatives produce a very satisfactory scale of values for coloring. Negatives with rich shadow detail and well modeled highlights give the best results. Any kind of original copy may be used providing it is first reduced to a negative for printing on Flexichrome Film. Flexichrome works well with Kodachrome and other direct-color processes as a means of obtaining prints with exceptional flexibility for corrective work or special effects. On the other hand the color transparency is very useful as a color guide.

One will usually select his pictures to color from proofs before making the actual working print on Flexichrome Film. The most satisfactory pictures for this method are those with rich modelling of detail and texture in both illuminated and shaded areas. Comparatively flat lighting is best for Flexichrome, as it usually is for color reproduction of any kind. If there is any fool-proof formula for success with Flexichrome, at least the first step is to select the right kind of pictures at the outset. The word "photography" means "drawing with light". The photograph should be responsible for all of the drawing in the picture. Good drawing is very important in a picture, and none will carry the power of conviction without it. Drawing gives the picture realism and dimensional solidity, while color gives life and punch. Best results occur when both drawing and color pull together. First examine the picture for its quality of drawing and adaptability to the process as well as the interest of the subject matter portrayed. Many pictures which are very pleasing in black and white will not make good color prints and should be left alone. As a general rule, pictures with strong, bald contrasts and few gray middle tones will not go into color well, while those with rich modelling of forms in a variety of middle gray tones will. The working print on Flexichrome Film should be a good, normal print, neither too pale nor too dense.

Although Flexichrome technique improves with experience, no special skill or background of art training is necessary to produce pleasing results from the very start. The Flexichrome print does a great deal of the work itself by virtue of its semi-automatic response to the hand coloring.

Flexichrome must not be confused with other methods of tinting or coloring photographic prints superficially with oils or water-colors. Flexichrome compares favorably in quality with Wash-Off Relief, Chromatone, and Carbro, and is quite similar to the latter method in texture and physical appearance.

Its advantages to the lithographer are:

(1) Where he customarily receives hand-colored black and white prints as color copy, he will be able to turn out a high quality job with a minimum of difficulty by the Flexichrome method.

(2) For two-color printing from monotone originals the Flexichrome print will eleminate the costly and uncertain methods of differential halftone, and extensive retouching.

(3) When the client has been reluctant to use color because of the expense of natural color photography, he can be approached on the strength of Flexichrome's economy, thus creating new fields for color lithography.

Those lithographers who have no art departments may also benefit by advising their clients and advertising agencies of the improved color results obtainable by the use of Flexichrome prints.

FIG. 1 FIG. 2 FIG. 3

Pre-Testing the Display

By ***WENTWORTH WEEKS***

TO SAY that Photometric Analysis measures visual efficiency in displays inevitably prompts inquiry as to the kind of display, size, characteristics, and purpose. Any measurement of efficiency is a measure of function. As the function varies, so must the measurement.

Photometric Analysis, as outlined in an earlier article (MODERN LITHOGRAPHY, Nov. 1939), consists of a recording process and an analysis of the record, thus involving two sets of factors to reach results. First, the controlling, or photometric factors influencing display appearance at point-of-sale—distance, focus, background and color—are tested in laboratory approximation to the subject and recorded photographically. Second,—the qualitative factors exhibited by the subject under this approximation of market conditions—visibility, legibility, integrity, attention and so on—are checked in each recorded aspect, with photo-electric cell to testify to the degree that any specific quality is present. These test factors apply equally well to almost every type of lithographic display.

There are, however, exceptions. The complete window display is one. Here the background factor becomes, as a rule, less important, since such an assembly literally creates its own background. Car cards are another. There the curve of the card and its customary elevated position set up additional forces to be considered. Posters and outdoor signs break up into separate categories. All others, with only rare exceptions, meet with approximately the same obstacles and put forward the same visual claims for recognition, remembrance, and desirability of their sponsor's product.

There is the single panel display for counter, or accessory window use, such as the Gobelin Black Seal card

Can the visual impact of a display be gauged before it is installed in the window or on the counter? The author thinks so and advances his method, applying it to representative types of displays and reporting the findings.

(Fig. 1), the Upjohn Cod Liver Oil (Fig. 2), and the Bromo-Seltzer (Fig. 3). There is the large size single panel, as a focal point for a general window, such as the Castoria (Fig. 4), used elsewhere in the store, but too large for counter purposes. And last, the multiple unit display of two or more pieces—such as the two Kodak cards (Fig. 5). The controlling factors are the same for all these.

Suppose we analyze them: The smaller single-panel display has physical limitations placed upon its size. Because of its area, it cannot be expected to deliver visual messages too far away. Therefore, in applying the distance factor, too much cannot be expected. Naturally the customer will see it both at close-quarters and further away but he won't see the same things.

Among qualitative factors, utility, sponsorship, continuity, and illustration are most important. The first two take advantage of expansion beyond package proportions to tell what the product is for and to stress the identity of the maker. In a trademarked item promoted by name alone this frequently substitutes for a firm name. The second two maintain the connection between this particular piece and the product which it features, knitting closer together their separate entities with color, typographic conformity, details of style, or by reproduction of package design. Thus this type of piece does first what the package cannot do and, secondly, makes the connection as evident as is possible. Identity also takes on increased importance, but this is frequently conveyed through illustration and continuity.

Wentworth Weeks is the originator of Photometric Analysis, a method for measuring the visual efficiency of a design. Discussion of the method has appeared in the trade press during the past year. *Tide* in one of its issues reported it as another contribution towards greater efficiency in advertising. MODERN LITHOGRAPHY ran an article by Mr. Weeks last November in which he reported preliminary findings based on application of the method to displays. Since then further tests have been made on its usefulness in measuring the efficiency of displays, and the findings from those tests form the basis of this article. The Photometric procedure is purely mechanical, recording evidence with camera and photo-electric cell and coordinating results by slide rule and adding machine. Reactions of the design to conditions limiting efficiency in use are registered in a series of photographs, a graphic survey of visual function. Then each of the assembled images is analyzed individually for its qualitative factors and the results reduced to arithmetic. A single percentage representing design efficiency emerges.

LET'S see how this works out. Of the displays shown the Gobelin provides the greatest opportunity for improvement. Sponsorship is the main quality conveyed, thus becoming a sort of institutional piece. There is little bid for attention or sustained interest; identity of the product is submerged in the lower block of text, lost under most conditions. Salesmanship is slight, carried in the same text, and illustration lacking completely. Continuity cannot be rated, for lack of sufficient evidence. Utility is a non-essential with this type of product—chocolates, in case you are wondering. Some association value may be derived from the top-hat and gloves, but, as usual, this gain is at the expense of other more important qualities.

So much for detail. In the primary qualities of visibility, legibility, and integrity much could be done. There is little to catch the eye, and what there is soon lapses into obscurity. The integrity stands up fairly well except against a white ground. The three primary qualities, of course, deal with the display as a whole instead of any one part.

Based upon available evidence, then, this display does not do as well as it could. It is limited in range, although definition and delivery are fair. It tells the name and brand-name, but little more without detailed examination possible only under optimum circumstances. Thus it can be adjusted to tell more to more potential customers, and earn a more competent living. What and how are clearly evident.

The Upjohn Cod Liver Oil display, by comparison, shows up much better. The sloping die-cut picking up the movement of sled and passenger makes a bid for attention, the rosy-cheeked child presents interest. Identity is closely linked to

the bid for attention. Sponsorship is weak, but strengthened through continuity—in color, typographic style, and mass—and illustration. Utility and salesmanship are present, the first strengthened by actual instruction in the circular spot, the second in name and its elaboration at lower left. These qualities seem to stand up fairly well in all aspects. On the face of it the display has almost everything. However, though visibility is held fairly well by the massed background behind the illustration, legibility suffers and integrity is below the Gobelin job.

Treatment of the display as a whole, preserving detail but organizing it into a more coherent unit—not a group artificially tied together by border and ground color—would help the whole and parts as well. Instead of grouped rectangles in a rectangular field, an associative form could simply connect them all, leading the eye from one to another while presenting a unified front at ranges that defy detailed examination.

The Bromo-Seltzer die-cut could never claim great artistic merit, but it has sturdy qualities of its own. There is little interest, although the die-cut asks for attention. Identity is clear, although slightly lacking in continuity. Utility is left to the illustration. Sponsorship here is expressed by the name itself. Salesmanship fluctuates, but is evident. By letting the package—through illustration—carry the greatest burden and adding, in the die-cut, something that the package could not do, this seems to conform to our earlier requirements for this type of display. But here, too, there are contradictions. Visibility is a little beyond the package. It is obvious that the injection of greater attention and interest, plus slightly more continuity between superimposed card and illustration would put more force behind the selling message.

ALL OF the displays have their points. This is no attempt to tear them limb from limb. But visual efficiency is made up of not one, but many qualities demonstrated under not one, but many adverse conditions. Therefore it is the working average that must be considered rather than any one advantage or any one use. This Photometric Analysis makes in its photographic record and cross-sectional examination of that record, aspect by aspect, quality by quality, before summation.

The large single-panel class of displays overcomes the limitations of size, but acquires other problems. The Castoria example shows a lengthened range, increased definition, and—improved delivery. As a general rule, this size permits illustration when the product will not be closely associated. Continuity is still an essential. But attention and interest come first.

The illustration of the child embodies both these qualities, and, due to the massed dark tones, stands up very well indeed. Identity, weakened by the use of vermilion, the only color besides black in the display, comes through fairly well. Utility falls by the wayside, except as implied by the child's presence and the subordinate text. Salesmanship suffers accordingly. Sponsorship and the only attempt at continuity merge in the Fletcher signature. Illustration is missing. Thus we have a slightly unbalanced result. Visibility, again due to the key illustration, is good, but legibility is only fair. Integrity is poor, as the upper panel sues the balance for divorce on grounds of non-support—and wins.

In this case where strong, positive qualities balance equally strong negative ones, only detailed consideration of all qualities in all aspects can

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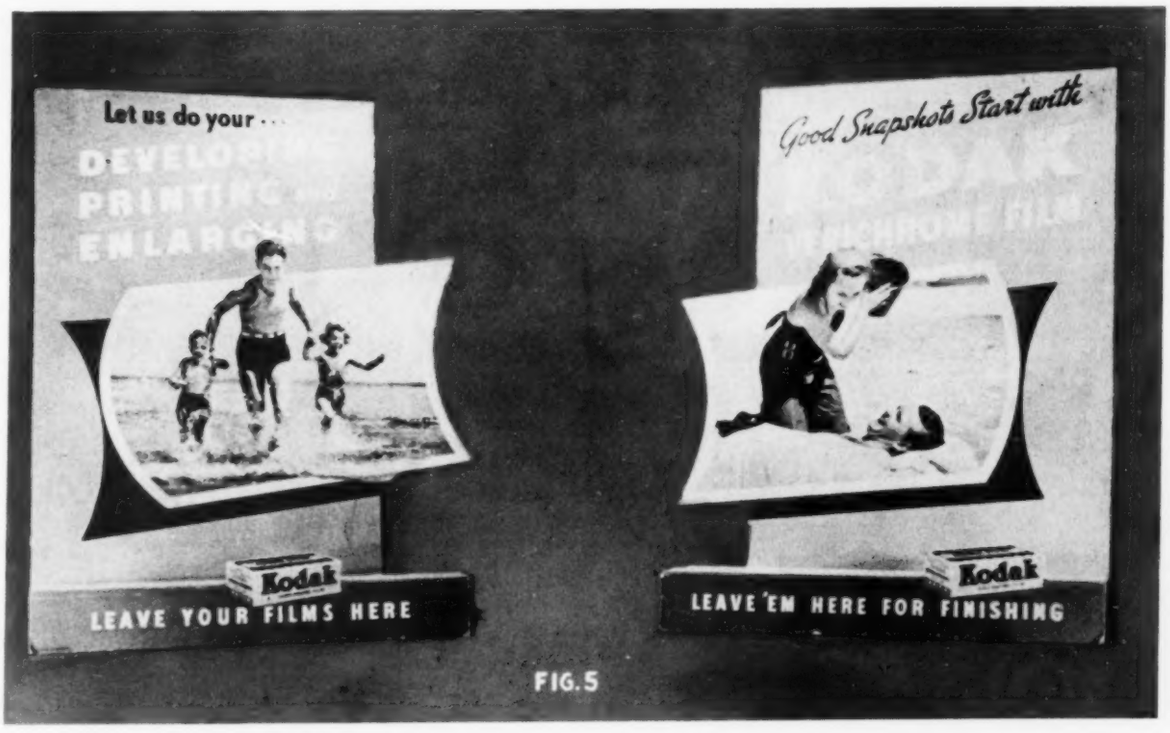
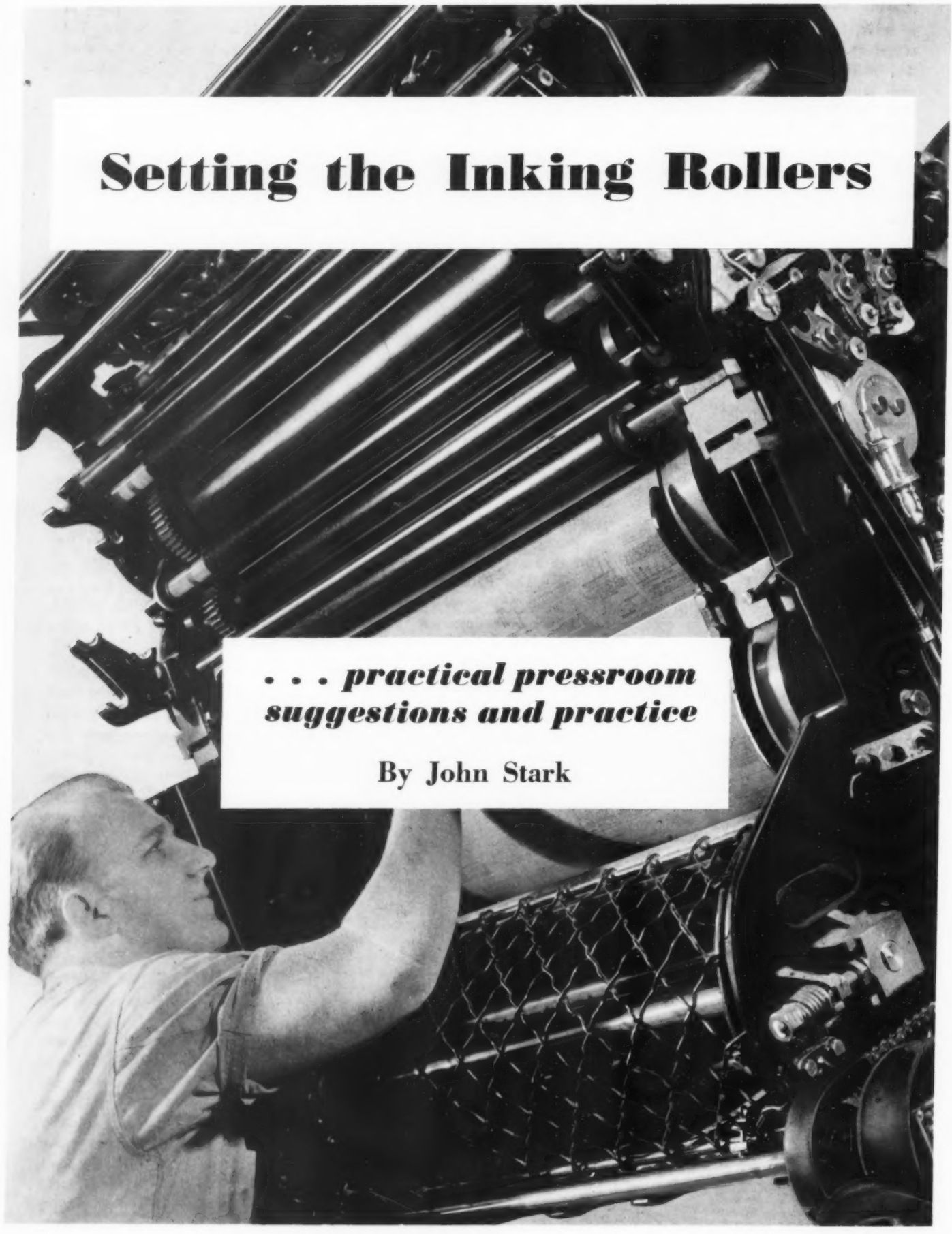


FIG. 5

Setting the Inking Rollers



. . . practical pressroom suggestions and practice

By John Stark

THE correct setting of rollers is one of the most essential points for successful operation of the lithographic offset press, and usually the method followed is to work from the bottom up and set the plate or form rollers first. There are usually four form rollers and in order to insure correct setting and inking these rollers must be accurately ground to a perfectly even circumference the whole length of the roller. The mandrell should be of such strength and rigidity that no "crown" is necessary regardless of the length of the roller.

To crown a lithographic form roller is the height of folly, as it is impossible to get even contact between form roller and plate if this is done. The illustration captioned Fig. 1 will demonstrate our point. Usually the form rollers are held in suspension at each extreme end above the top side of the plate cylinder. If there is any sag, it will occur in the center of the rollers, causing too much squeeze at this point between the form roller and the printing plate. If the roller is crowned this evil will be intensified. Therefore, the only solution is a mandrell to hold the form rollers perfectly rigid, and a finished form roller ground perfectly even over its entire surface.

To set the form rollers they should be brought in contact with the surface of the plate, which has already been built up to the proper height for correct printing, which is usually the height of the bearers. Use strips of paper .003 in thickness, and to insure perfect contact the full length of the rollers, you should be able to pull them out fairly easily, as contact is all that is necessary to insure good inking if the plate has the correct grain. In fact this factor of contact is all that is necessary all the way up from plate rollers to the ink fountain.

Some authorities recommend that the form rollers be inked up and dropped in contact with the plate so as to leave a mark evenly across the plate 5/16" wide. Because of the fact that some rollers are either softer or harder than others, however, this method is not very accurate. In fact if this method was literally carried out, some types of rollers would actually be acting as rotary squeeges and squeeze the water out of the grain of the plate at every revolution of the cylinder. Next ascertain the correct position for your steel storage riders with even contact, taking care to avoid having them so tight that friction will ensue when running. If this practice is continued all the way up, checking the contact between all the riders, rollers and storage drums, you will then be able to get the best results when commencing to run. One very important point is to see that your fountain roller is in the best of condition, taking great care that it comes in perfectly even contact with the fountain and the storage drum when in operation.

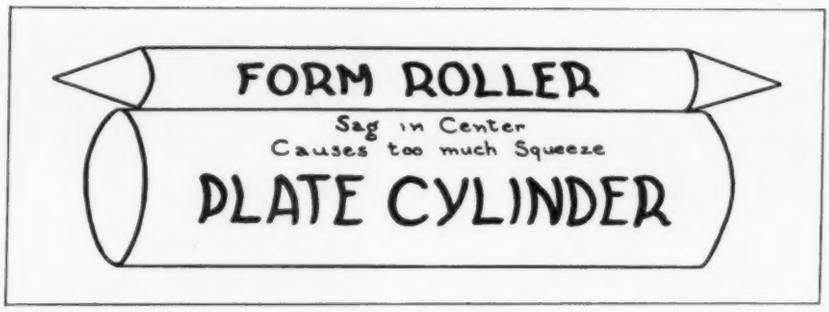


FIG. 1

If you are using rubber rollers and they have become uneven through any cause whatever, you will find that they can be made perfectly even by placing them in a lathe and having a fast-revolving aluminum electric grinder move very slowly along the entire surface, while the roller is turning slowly in the opposite direction. It is usually necessary to go over the roller twice in this manner, the second time more slowly than the first, thus giving the roller the correct finish. If the roller is smoothed down with a mixture of french chalk after this operation, it will be found to be in a condition practically the same as new. This operation can be done in any well-equipped machine shop.

On the other hand, if you are using leather or grain rollers on the press and they have become baggy or out of shape, it will be best to send them to an expert roller maker, either for re-covering or re-building or, in some cases, for both. In the long run it will be more profitable to send grain or leather rollers to an expert roller maker to be fixed up, as they will be more even as a result and stand up longer than with a home-made job.

For good ink distribution on the offset press, it is necessary that the ink fountain be correctly set for the particular job at hand. If it is a fairly heavy job, the ink fountain blade should be set so that a long stroke can be used at each press revolution. This will assure a wide film of ink being carried by the ductor roller to the distributing drums, thus giving much better ink distribution than would be possible when a short stroke is used. A further advantage of this method of setting the ink fountain is that slightly more or less ink can be fed to the plate by manipulation of the stroke.

It is our opinion that the day is not far distant when ink agitators will be an integral part of the ink fountain on the offset press, because of the well known fact that freshly mixed ink will distribute and print much better than ink which has not been agitated or mixed. This is constantly demonstrated by the fact that during the course of a run you will see the offset pressman agitating the ink in the ink fountain, not only to keep it following the fountain roller but because he knows that his ink becomes stagnant if he does not agitate it by hand.

It should be understood that rollers which are used in a pressroom where the relative humidity and the temperature is controlled have a much better chance than rollers which are used in pressrooms subject to the vagaries of all kinds of atmospheric changes. On presses equipped with automatic wash-up machine, some pressmen use gasoline as an ink deter-

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SYNTHETIC RUBBER

assumes new role in industry,—including, of course, the Graphic Arts.

BY WILLIAM G. GOODWIN
Development Engineer, Dayton Rubber Mfg. Co.

THE invasion and capture of Holland by German armed forces has brought the Dutch East Indies into strategic relief. For whoever ultimately gains control of this rich Far East possession will also gain control of the source of the world's largest supply of natural rubber, and might permanently disrupt present trade. Consequently, rubber prices in the United States, which alone uses as much natural rubber as the rest of the world combined—about 500,000 tons annually—have been on the upgrade.

Realizing to what large degree the United States has been dependent on foreign sources for its natural rubber supply, it has only been natural that for many years scientists and chemists have directed their efforts toward the production of synthetic rubber as a means of assuring America's independence of foreign rubber. From this scientific research has come a product superior in many ways to the natural product, and it has found wide acceptance and application. Synthetic rubber is derived from a variety of common materials. In some countries, it is made from coal, starch, petroleum, tar and hydro-carbon gas. In this country, it is derived from very cheap and abundant materials—coal, lime, salt and water.

In the production of synthetic rubber rollers for offset presses, there has been developed, after sixteen years of research, a combination of synthetic compounds which it is felt will meet the requirements of modern printing. These requirements are:

1. A roller with toughness and high tensile strength;
2. One possessing non-swelling or cracking properties;
3. One that will permit a quick and easy change of rollers;
4. A roller that will not deteriorate with age;
5. A roller that can be lathe-ground according to specifications;

6. A roller that stays round and true;
7. A roller that can be manufactured with any degree of softness or hardness;
8. A roller that will not accumulate varnishes from the inks and become sticky, causing specks;
9. A roller that does not repel water and cause it to lie on the surface in the form of bubbles, or cause an accumulation of water to form in the distributors or intermediate position.

Many now agree that the synthetic rubber roller will meet the requirements outlined above. Of course, an important consideration in helping the synthetic rubber roller meet the above requirements lies in its proper use and maintenance. To begin with, the successful use of the synthetic roller depends a great deal upon how much care the pressman exercises. Not that synthetic rollers require more attention than rollers of other types, but the pressman who uses them must forget many of his previous ideas regarding rollers in general, and their construction.

After considerable experimentation, field and laboratory tests, with various kinds of special, as well as the more common kinds of wash up solutions, and with all types of inks, the following wash up solution has been found most satisfactory from the standpoint of results, ease of application and common availability of the ingredients.

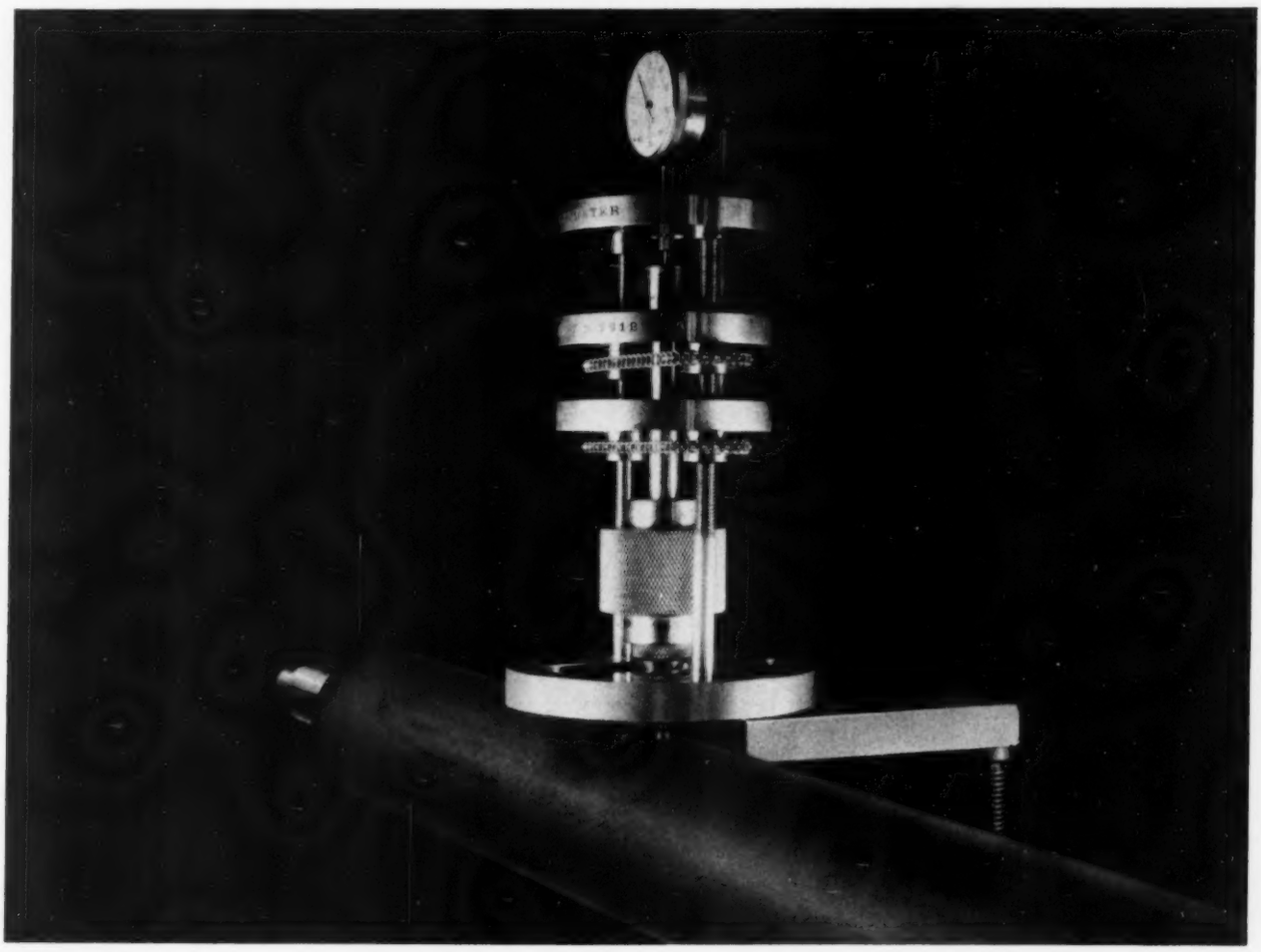
Cleaning Solution—Gasoline (kerosene is recommended when changing colors).

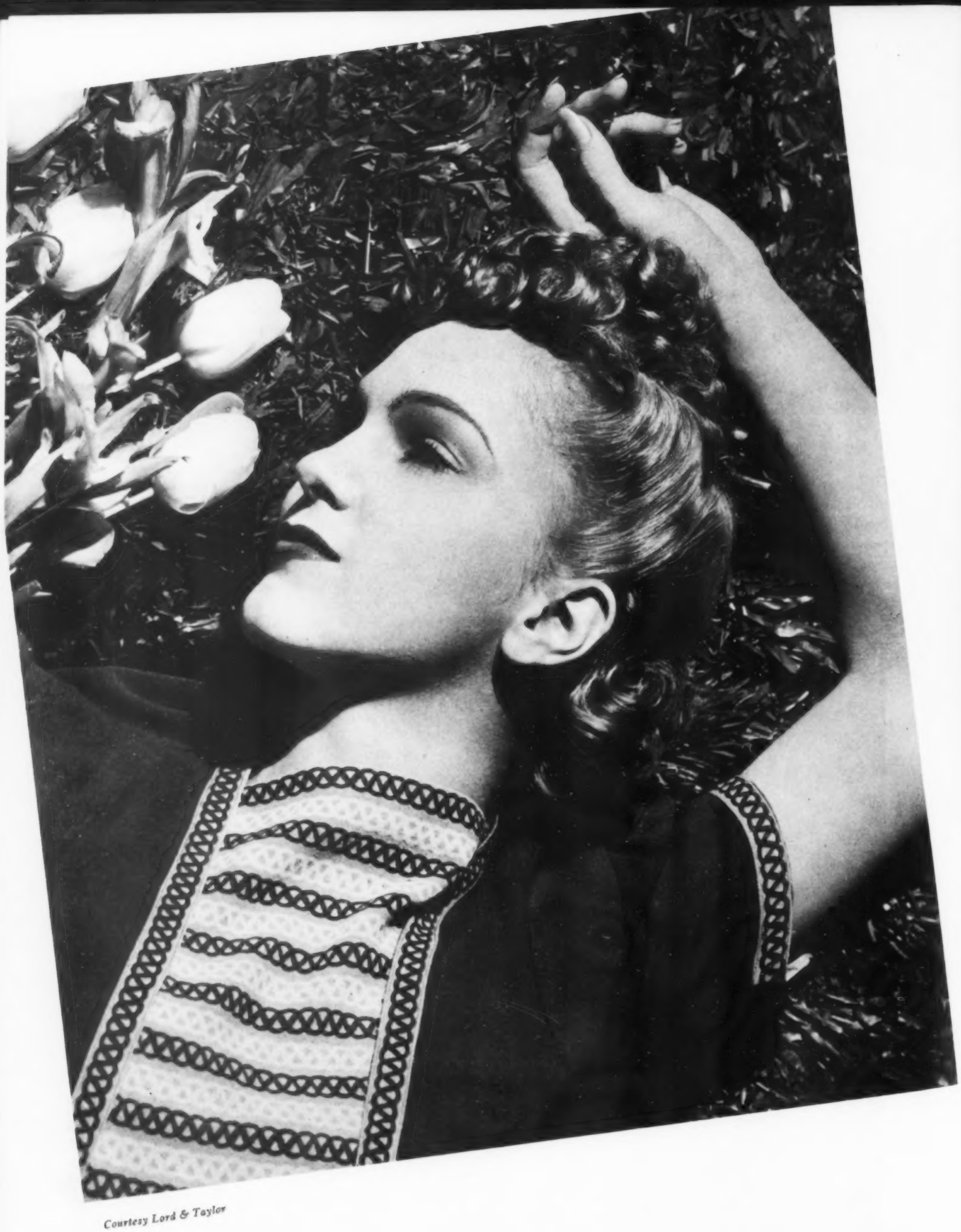
Removing Dried Inks—If rollers have been allowed to accumulate dried ink, wash with alcohol. A small amount of powdered pumice sprinkled on the cleaning cloth will help, then wash with gasoline to remove the pumice.

Through neglect some types of synthetic rubber rollers may become gradually coated with a hard dry ink deposit. This condition will not cause cracks to render the rollers unfit for service but may cause a scum on the surface of the roller. This scum may be quickly removed with very little effort by soaking for one hour in a three per cent lye solution, making the synthetic rubber roller again good as new. (A word of caution: this will ruin some rollers, so be sure that your roller manufacturer approves the lye solution before it is used.)

Synthetic rubber rollers have been in use on offset presses now for about seven years. Today practically all roller companies have some type of synthetic offset roller on the market. Some of these rollers are good, and, of course, some are still in the experimental stage. The lithographer is advised to investigate their printing qualities through actual demonstration before buying.

Made from cheap and abundant materials—coal, lime, salt and water—the synthetic rubber offset roller is produced in various degrees of softness making possible a surface which lends itself successfully to the reproduction of a wide range of values.

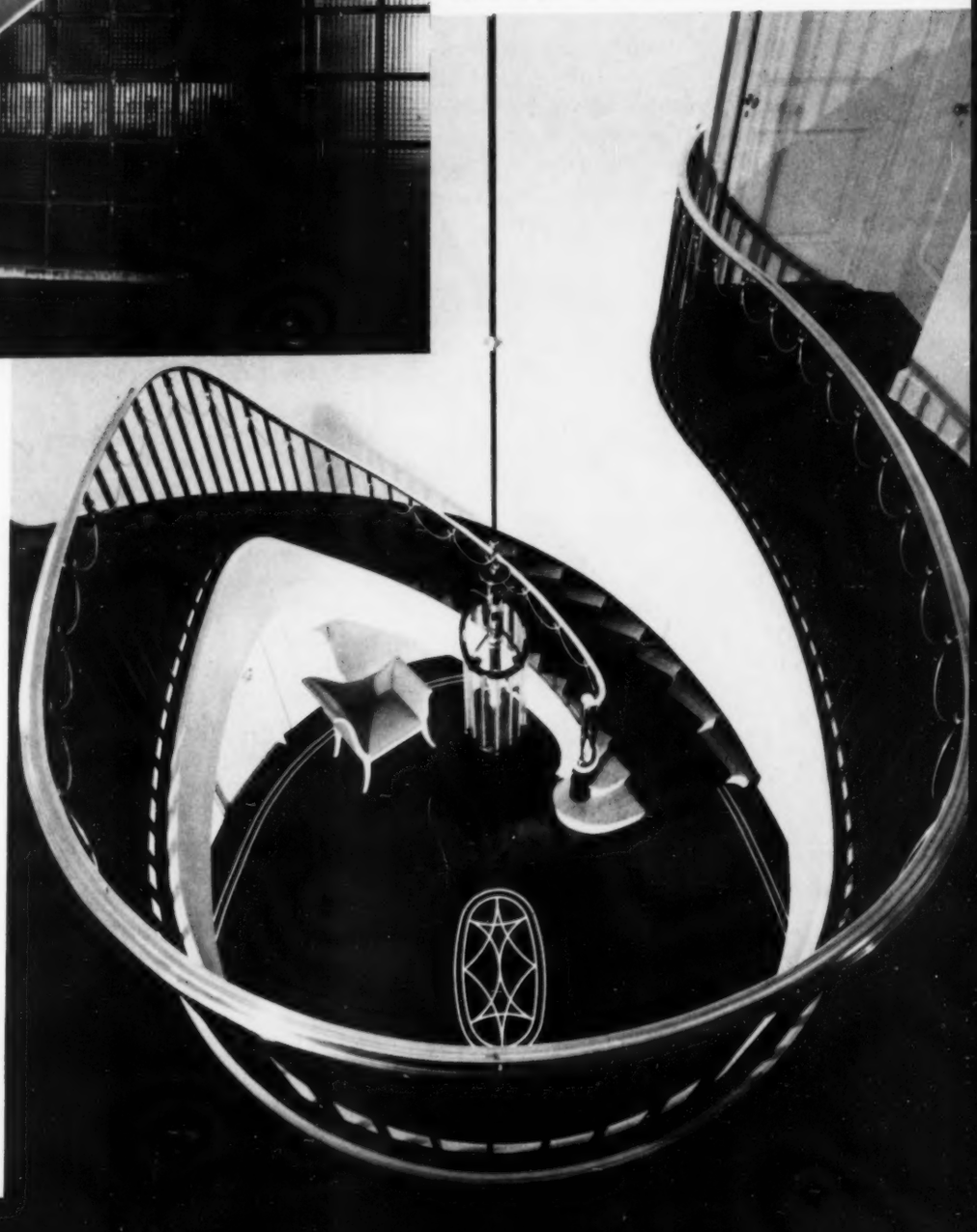




Courtesy Lord & Taylor

Courtesy Rockefeller Center

Interior designed by Paul MacAllister, A.T.D.



WHEN Frank Randt, whose work you see on these pages, was asked recently what sort of training he considered of most value to the advertising photographer, he replied, without hesitation, "Engineering." Well he might, too. For it has undoubtedly been Frank Randt's training as an engineer, his approach to each assignment with an engineer's viewpoint, that has brought him to the fore as a precisionist in the photographic world. Known especially for his architectural and illustrative work, Mr. Randt has for the past three years done all of the experimental photography for Dufay Color. Among his clients are many national advertisers, prominent architects and interior decorators, and several well-known publications.

JULY 1940

New

COMPETITION *for* BLACK & WHITE?

New developments in printing processes are described which, the author suggests, may cause the photo-lithographers to look to their laurels.

By Ralph Alsobrook

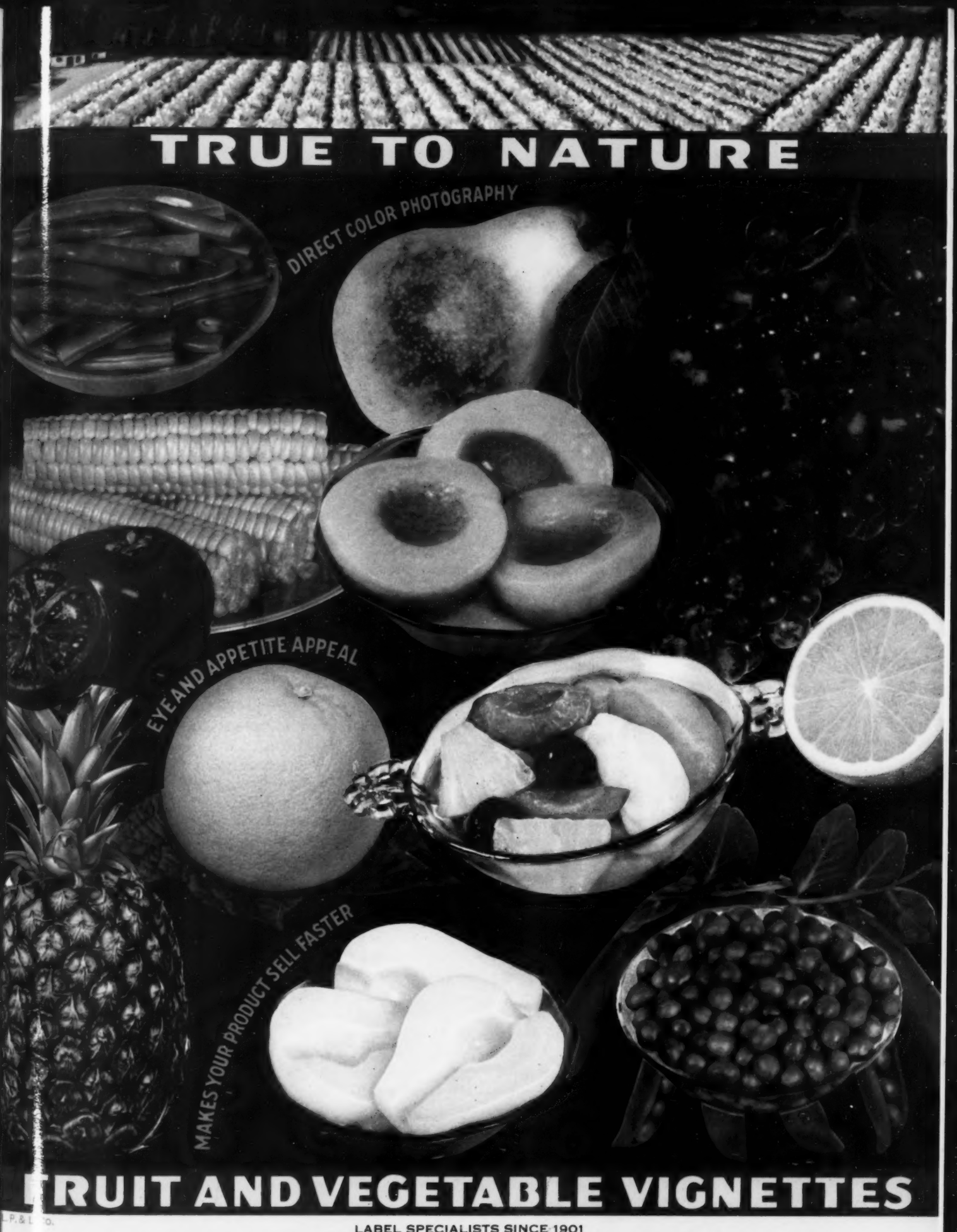
AT THE Photo-Engravers' convention last fall one of the speakers described a new plate making process which, he said, "in the years to come will bring back to the field of the photo-engraver much that has been lost in the last years to offset." He declared that in his opinion offset printing in one color is "just no good." "Therefore," he said, "the work that has gone from the photo-engravers has gone to offset printers and if it can be brought back to the field by something that is better than offset printing, I am sure there is a good chance to get it back."

What is this new process that threatens the black and white litho field? The speaker described it in his talk, a full report of which may be read in the November 1939 issue of the *Photo-Engravers Bulletin,* as "photo-engraving applied in an entirely different way", and at the same time linked it closely with intaglio or gravure printing. Whatever the process is, it should be of great interest to the lithographer since any wide adaptation of the process, and the speaker does imply that eventually the process will be made available, will very likely bring new competition in a field in which the lithographer has been growing year by year. From recent patent applications filed, we gather that the new process combines the control and flexibility of the halftone engraving process with the added tone range possible to intaglio or gravure.

The basic principle of intaglio or gravure is the use of deep wells or pits in the printing plate to carry the ink rather than carrying it on the surface as do other processes. In order to maintain uniformity in the amount of ink, a metal blade is drawn across the plate removing all excess. The result might be stated as level pits of ink, just as a housewife levels off a teaspoon of baking powder. This knife edge is called a "doctor blade". For effective work, as well as to prevent wear on the plate, the blade must have a continuous metal surface to rest upon. In gravure as regularly practiced, this is provided by breaking up the continuous tone of the resist used with a cross hatching of solid lines, forming a screen. The screen is printed as such and not interposed in printing the continuous tone subject, as is done in half tone. This provides a cross hatching of solid metal on which the doctor blade rubs. The interstices between the lines are all of equal area but by the method of processing they are etched to unequal depths. Because the ink is carried in these pits or wells and drawn into the paper by pressure, it is possible to obtain greater ink carrying power and therefore a longer range of tone than in surface printing. It is also possible to obtain cleaner whites and lighter grays and it is this increased tone scale which makes for the beauty of gravure printing.

It has, however, serious drawbacks. Ordinary resists such as cold-top sensitized glue, etc., cannot be used for gravure. The exposure makes these resists uniformly impervious to the etches, whereas we need a medium which remains semi-porous in proportion to the degree or depth of etching desired. Such a medium is available in sensitized gelatin used in the form of carbon tissue. It is exposed first to the continuous tone positive and then to the gravure screen. The doubly exposed tissue is then transferred to the copper and developed in hot water. The hot water removes all the unhardened (unexposed) gelatin leaving a resist which varies in thickness in direct proportion to the exposure.

Due to the varying thickness and, to some extent, varying hardness of the resist, the action of the etching acid is controlled to give a depth of etch to some extent proportional to the original exposure. The action is not perfectly proportioned and the acid etch progressively destroys the resist during the action, necessitating special procedures. Because the resist is partially destroyed, which action



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cannot be halted, it is also impossible to stop the etching to examine or prove the plate. When it is stated that five strengths of etching solution are necessary, each used in specific order and for varying lengths of time, one can appreciate the degree of skill required for satisfactory work. Besides these difficulties there is the added inability of obtaining exact register or size proportionalities because the carbon resist cannot be depended on to transfer in exact shape and size.

In order to overcome these difficulties, the process must be adopted to resists which are coated on the metal before exposure and which are not affected by the etching solution. Such resists are the familiar engraving resists as cold-top enamel, etc. Intaglio as practiced today cannot use such resists because they are not at all porous to the etch, and no variation in depth of etch is possible. Their advantages include exact registration and the ability to stop the progress of the etch at any point, making inspection and staging possible.

If such enamels give the desired benefits, the question naturally follows—can the process be adopted to their use? Notice the difference, we are asking ourselves to adopt the process to the material, not the material to the process. The enamel being unable to give a variation in depth of etch, the question becomes:—can the process be worked at a uniform depth of cut? The answer is "Yes" if the "Doctor Knife" support can be maintained with a variable rather than a constant area of ink well.

An ordinary half tone engraving, if made from a positive instead of a negative, would function as a variable area intaglio except that because of the absence of bearing surface in the dark middle tones and shadows, the doctor blade would be unable to function and would quickly destroy the gradations of the plate. Two methods have been suggested for obtaining the necessary metal ridges to support the doctor blade. One depends on utilizing not more than half the scale regularly used in half tone work, the other takes advantage of certain inherent characteristics of the half-tone screen to obtain an image consisting of parallel rulings.

In the first method the camera is focused and the screen set at a normal distance. It is then moved closer to the ground glass until minute pin point dots appear in the highlight areas and the usual checker board pattern associated with middle tones appears in the shadows. At this setting an exposure slightly less than normal produces what is called a "hemi-tone" positive, a continuous tone negative being used as copy. Only about one half the normal scale is present (as mentioned above) in this positive. The loss of scale or contrast must be made up by deepening the etch, as compared with the depth which would be required if a full scale of half tones were carried.

The copper surface is preferably sensitized with regular cold-top enamel (sensitized shellac) and exposed under the "hemi-tone" positive, developed normally in alcohol and etched in a single strength of Ferric-chloride. Borders may be protected as usual with asphaltum varnish and the etching may be staged as in a regular engraving. The plate, once cleaned in syanide and proved, may be inked for a new resist and re-etched or locally etched. Tool work, of course, cannot be done, the walls isolating the wells must not be broken down.

IN THE second process, an ingenuous use is made of halftone screen properties to obtain a fine line connecting all the half tone dots on the diagonal. A half tone negative is prepared in the conventional manner except that the screen is adjusted to give highlight dots overlapping sufficiently to give the most minute pin point of clear area, and preferably fairly definite small shadow dots. Without removing the plate from the camera, an exposure similar to a flash exposure is given, using a special diaphragm. This consists of a narrow diaphragm. With this diaphragm so placed that the slit is parallel to one direction of the screen rulings, an effect is obtained akin to the removal of the rulings perpendicular to it. In other words, the screen now acts like one of parallel rulings only.

A short flash exposure under these conditions prints as parallel lines running diagonally through the checker board dot pattern. The duration of the exposure and to some extent the width of the slit determines the width of the final line. This line must have sufficient body so that the etching will not undercut it to a point where it will not adequately support the doctor blade. The exposure approximates the usual shadow dot flash which it also supplants.

The resultant negative will show a normal highlight and light middle tone pattern, but the middle tone dots will be definitely connected in chains and the darker tones will reproduce as strings of dots on fine lines. The usual small shadow dots are now replaced by fine parallel lines.

A positive made from this negative is used in printing the resist which can be a cold-top enamel as suggested for the "hemi-tone" process. Since a full scale of half tones is utilized rather than merely half the normal scale, no excessive etching or staging is required. Staging, proofing and fine etching, however, are all possible corrective steps with some tooling possible in the darker middle tones and shadows. The increased ink capacity and the decreased white areas in the shadows of this process make it possible to obtain maximum tonal range, even greater, in fact, than with normal gravure.

Another innovation which has been patented is the use of half tone copy for gravure. Advertising copy, in particular, is subject to such adaptation. At the present time engravings, electrotypes or special proofs are sent out to magazines for inclusion. Where the magazine is printed by gravure, either the original copy or continuous tone positives of the original must be obtained. This runs into additional expense and complication and places gravure at a disadvantage.

By sharply focusing the half tone copy and then moving the ground glass 1/64th of an inch in either

(*Turn to page* 55)

Offset Paper at Work

The fourth in a series on offset paper by Mr. Wheelwright, editor of "Paper & Printing Digest" and author of "From Paper Mill to Pressroom." He is a member of the Technical Association, Pulp and Paper Industry, and also of the American Institute of Graphic Arts of which he is an honorary vice president.

BY WILLIAM BOND WHEELWRIGHT

THE structure of bristol boards was described in one of the previous issues. The tendency of the fibres within a sheet to lie parallel to the stream of water in which they are carried either over the "wire" of a Fourdrinier machine or a mould of a cylinder machine was explained. It was pointed out that the shake applied to the Fourdrinier machine counteracts this tendency and results in a part of the fibres assuming a transverse position in the web. It was made clear that the absence of shake to a mould in a cylinder vat allows the fibres to pursue their natural tendency to lie parallel, pointing in the so-called machine direction.

A good way to observe the results and contrasts resulting is to take two samples of the same substance weight; one made on a Fourdrinier machine, the other on a cylinder machine. Cut them into squares of identical size. Then by turn hold each sample by the edges between the thumb and fore-finger and spring the sample into a convex position. Observe the resistance, and then shift the sample in the fingers so as to bend it transversely to the direction first tested. There will be an apparent difference in the resistance to bending. Crosswise of the grain the resistance will be considerably less. Such difference, however will be much more marked in the case of the cylinder bristol. The more completely the fibres are crossed in the sheet, the less apparent are such differences. In a handmade paper there is little if any appreciable difference in flexibility, because paper being made in a hand mould is shaken from left to right and from back to front while the excess water is being eliminated. An identical formation could only be produced on machine-made paper by pasting two plies together, having the grain in one at right angles to the grain in the other.

As it is well understood that paper feeds better when the grain of the sheet is parallel to the gripper edge, and that less misregister is likely to result under these conditions (since expansion or contraction due to changing atmospheric conditions takes place crosswise of the grain), it is usual to get lithographic or offset paper with the grain lengthwise of the sheet. In selecting the size there is the possibility of overlooking the grain direction which will obtain in the ultimate printed object. The natural impulse is to impose a form so as to get the maximum number of printed pieces out of the given sheet.

Take a very simple case, a bristol sample being printed for a paper house. Here it is important to produce samples that are snappy. If, in order to economize on stock, it turns out that the grain runs crosswise of the small sample, the card will feel flabby and lifeless. Compared to the very same stock cut with the grain long, one might easily assume they were different grades, unless both were scrutinized for other properties. It is suggested that two cards be cut from the same sheet in opposite grain directions and the difference in apparent stiffness noticed.

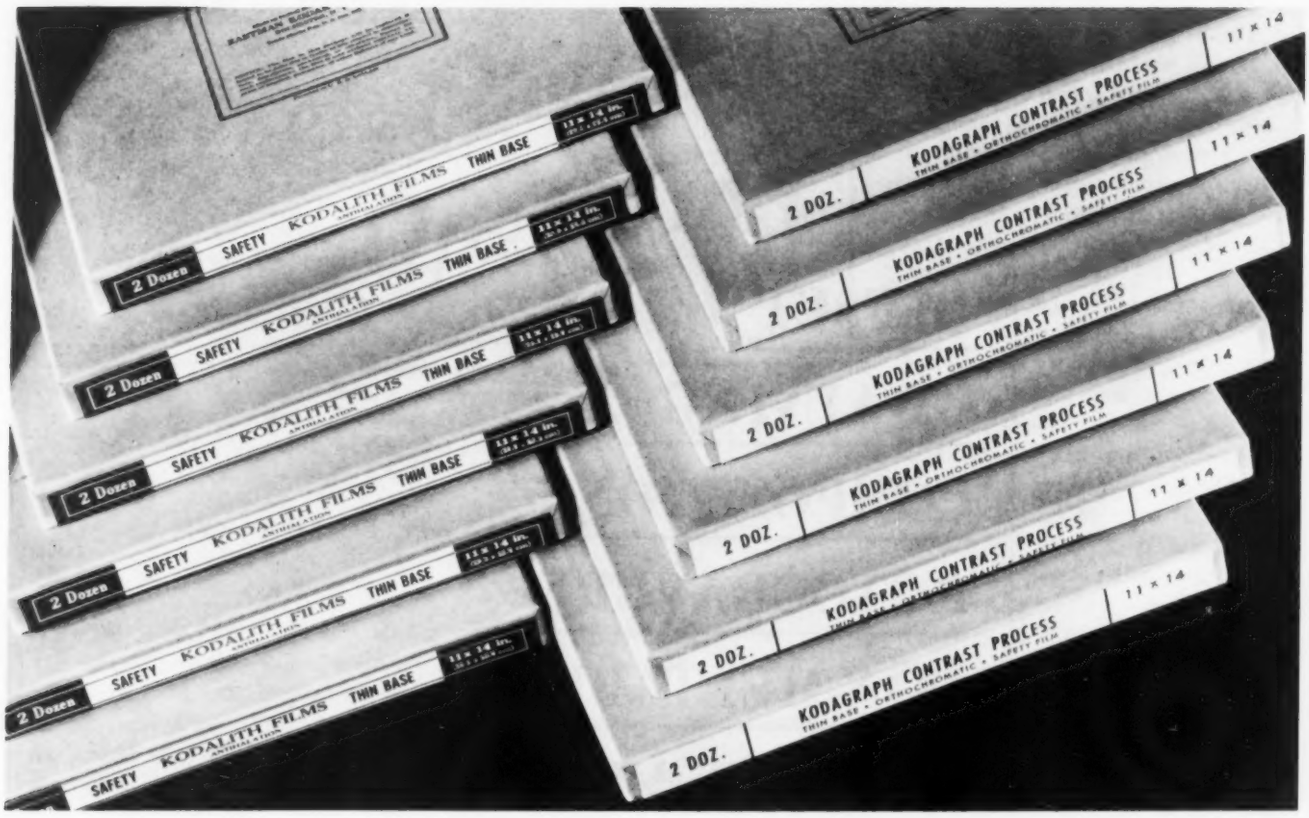
There are many more complex items to be produced, where for good reasons the grain direction is really important. The safe way to proceed before ordering stock is to make up a dummy with the grain running in the direction most desirable for the given object. Then calculate what size sheet and what substance weight will best serve the purpose of your customer, while conforming at the same time to press requirements. Better to cut to waste than sacrifice on the quality of the finished job.

If there is any doubt whether the purpose will be better served by a cylinder bristol than a Fourdrinier, the making of a dummy from samples of both kinds will quickly settle it.

In this respect the offset printer has an advantage over the letterpress shop in paper selection. Printing requirements for the latter often dictate the choice of a so-called "printing bristol," or "mill" bristol. Such bristols have better formation and finish than index or other bristol made on Fourdrinier machines. They have to be made on cylinder machines, however, and consequently the grain direction is of the parallel type. Unfortunately too, there are only two stock sizes, 22½x28½ and occassionally 28½x45. The cylinder machines are built to accommodate these sizes. They are not constructed so flexibly as Fourdrinier machines and the possibility of making odd-sized orders is more restricted. In other words the "fill" for a Fourdrinier machine has a much wider range.

The offset printer who can reproduce halftones on less smooth paper than the letterpress man may take his choice from stock bristols in three different sizes, 22½x28½;

(*Turn to page* 53)



KODALITH AND KODAGRAPH
Two Types of Thin Base Film

KODALITH Thin Base Film is the standard material for use with white-flame arcs. Now, a faster film—Kodagraph Contrast Process Thin Base Film—is supplied for use with Photoflood, tungsten, or mercury vapor illumination. These two types make the valuable thin-base feature available regardless of the type of lighting used in the photomechanical plant.

With a sufficiently thin base, lateral reversal of the image on metal becomes a simple matter. You merely print through the base with the emulsion side of the negative toward the exposing light. Either Kodalith or Kodagraph Thin Base Film also lends itself to the making of complicated combinations.

Orthochromatic and antihalation backed, these films are recommended for both line and halftone work. Because of their high degree of uniformity, exposure and processing procedure can be quickly standardized. Kodalith and Kodagraph Thin Base Films are supplied in sheets and rolls, and sell at the same prices. Order the type to fit your lighting equipment from your Graphic Arts dealer.

EASTMAN KODAK COMPANY *Graphic Arts Dept.* Rochester, N.Y.

Offset Press Operation

Another in the series on pressroom problems by Mr. Latham, well-known writer, lecturer, authority and trouble-shooter. In this article the proper use of bearers on the offset press is discussed.

BY C. W. LATHAM

THE BEARERS of an offset press are the steel bands at each end of the plate and blanket cylinders. They are there for several very good reasons but are very often given less attention than they deserve.

It is possible to operate a press very satisfactorily without using the bearers and many presses throughout the country are being run this way, particularly in tin printing plants. When this is done, however, care must be taken to adjust cylinder diameters to a ratio that will insure synchronous rotating speed in order to prevent gear streaks.

If the bearers do not touch, or if they touch only lightly so that no bearer traction is produced, then all the driving of one cylinder by the other is done by the traction between blanket and plate, and by the gears, and they must synchronize accurately.

When the diameter of the blanket cylinder is such that it wants to drive the plate cylinder faster than the gears will allow it to be driven, then the gears act as a brake, and a chattery brake it is. It is this chatter of the gear teeth being forced into too violent a contact that causes gear streaks.

One of the purposes, then, of bearers is to prevent blanket traction from driving the plate cylinder too fast. Bearers are ground to diameters that insure synchronous rotating speed between the two cylinders. These diameters are the same as the pitch diameter of the gears. When the bearers are brought together with sufficient squeeze pressure between them to cause greater bearer traction than blanket traction, then all of the driving is done by the bearers when the press is running with pressure on, and the gear teeth have very light contact or none at all.

Another point in favor of bearers is that they keep the gears in proper meshing adjustment at all times when the pressure is on. A properly-made gear tooth is so designed and cut, that it is at it's highest point of efficiency when the pitch lines of two gears exactly coincide, and it is difficult to attain this exact adjustment without bearers. The bearers, being ground to the pitch diameter of the gears, insure an automatic adjustment of mesh when they are brought into contact.

A final point of value of bearers is that they form a gauge for packing levels when building up plates and blankets. When we speak of the cylinder undercut, we mean the area of the body of the cylinder which is below the bearer surface, and we over-pack or under-pack in relation to the true diameter, which is that of the bearer.

Theoretically, one revolution of the blanket cylinder will drive the plate cylinder one revolution, but in actual practice, due to creep, dirt, wear and so forth, one cylinder may turn a fraction of an inch further than the other, and this causes a thickening of the halftone dots if it is not compensated for. This compensation is accomplished by breaking the contact between bearers, and re-positioning the cylinders at the end of each revolution and starting them off again at exact synchronization.

The breaking of contact between bearers is done by a flat on each of the blanket cylinder bearers. The re-positioning is done either by an adjustable split gear or gear segment. It is necessary to maintain this flat during the life of the bearer, filing it down from time to time as the bearer wears. It is also necessary to keep proper adjustment on the re-positioning device, making sure of a snug fit that will insure perfect register between plate and blanket.

To insure efficient performance of bearers it is necessary to maintain greater traction between them than that between blanket and plate. To do this it is necessary to maintain maximum pressure between bearers and minimum pressure between plate and blanket.

In adjusting bearers, many pressmen make the mistake of inking a spot on the lower bearers, bringing up the cylinder till the bearers just touch and then adding three more points of pressure and calling the job done, with no thought to bearing clearance. Or they may use the feeler method with no better results unless the press is new and has preloaded frictionless bearings, though even then there is the chance of slack in the bearing housings.

A simple method to employ in adjusting bearer pressure is to overpack both blanket and plate to an amount that will lift the plate cylinder up when the pressure is thrown on, until its journals contact the bearing cap, and all the clearance is out. The amount of overpacking necessary to do this will vary with the size, age and clearance of the bearing, but an overpacking of four to six points on each cylinder should do it.

Now ink up the plate cylinder bearers with a thin film of ink, re-

(*Turn to page* 57)

Technical News and Literature

This is a regular department conducted by Mr. Martin, of the Harold M. Pitman Company, in which technical books, articles, papers and similar literature of interest to the lithographic industry are reviewed and discussed. It is intended as a supplement to the Lithographic Abstracts prepared by the Research Department of the Lithographic Technical Foundation, Inc., in which the author will comment upon and elaborate further those items which, in his opinion, are of outstanding value to the lithographer. It should prove a valuable adjunct to the educational work of the Foundation and be of time-saving service to the busy reader.

BY KENNETH W. MARTIN

Filter Factors in Color Photography. J. L. Tupper. *Photo Technique*, 2, No. 5, May 1940.

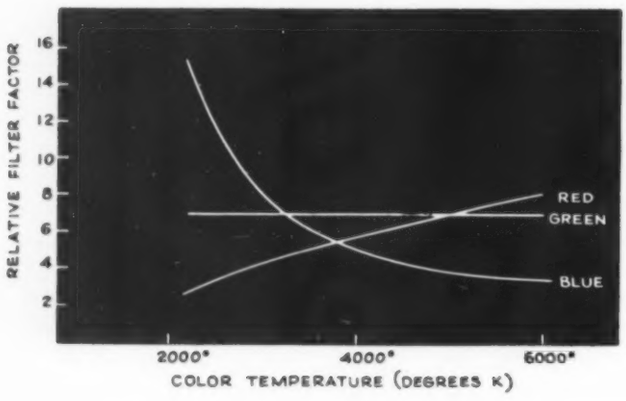
Filter factors as commonly determined for color separation work are not accurate due to the failure of the reciprocity law. Accurate filter factors can be determined easily.

MR. TUPPER defines filter factor as the number of times the exposure must be multiplied when using a filter in order to obtain the same photographic result when using a gray scale for copy as when no filter is used. He lists six variables which may affect the filter factors. They are:

(1) *Filters.* Most reliable manufacturers of filters will supply filters which are accurate within 10% of rating. Some filters will deteriorate with age but such changes are generally slight and slow.

(2) *Light Sources.* The proper functioning of a filter depends not only upon its characteristics but upon the quality of the light which it filters. White flame carbon arcs do not have the characteristics of the black body light sources used as standards for rating "color temperature." Some type of voltage regulation should be used so that each exposure made will be made with light having very nearly the same intensity and spectral characteristics.

(3) *Lenses and Shutters.* Mr. Tupper points out that shutter speeds are variable and that the f/ markings on lenses should not be relied upon too closely.



Relation between relative filter factors for tricolor filters, for light of different color temperatures

(Reproduced by courtesy of Photo-Technique)

(4) *Photographic Emulsion.* Filter factors would vary when used with color blind, orthochromatic and panchromatic emulsions. An emulsion not sensitive to red light would naturally require an extremely long exposure when used with a red filter. Different batches of emulsion from the same manufacturer will vary and for precise work, filter factors should be determined for each emulsion number.

(5) *Development.* The type of developer used and the time and temperature of development will have an effect on the filter factor. All three of these variables should be controlled as closely as possible.

(6) *Exposure.* The reciprocity law states that: Photographic effect (density) = (Light intensity) × (Time of exposure). Thus it should be possible to obtain the same effect in a negative by opening the lens one stop number (which doubles the light passing) and cutting the exposure time in half. Actually this relationship is not sufficiently accurate for exact calculation of filter factors. When the gray scale is exposed, each step represents a difference in light intensity and it is not possible to estimate accurately the proper factor by making one exposure of the gray scale using the filter. Furthermore, if the no-filter exposure were to be increased, because of a greater degree of enlargement or because a large subject required a different placement of the lamps in order to get proper coverage, a change in the filter factor would occur and the true factor should be determined as explained below.

The filter factor may be determined accurately by using the following method: Taking the filter factor given by the emulsion manufacturer as a first approximation, a series of exposures should be made using times both under and over the indicated filter factor. The negative should then be developed and the gray scale negatives compared to the gray scale negative made with no filter. In the example given, the no-filter exposure was 10 sec., the manufacturer's filter factor, for the

Turn to page (57)

IN AND ABOUT THE TRADE

Canadian Group Elects

A. C. Scott, Plow and Watters, Ltd., manufacturing stationers, Montreal, Canada, was elected chairman of the National Council of Employing Printers and Lithographers at the annual meeting in Montreal last month. R. Johnson, president of the Canadian Lithographers Association, Toronto, was named vice chairman. G. H. Fisk, secretary of the Employing Printers Association of Montreal was elected secretary-treasurer. The National Council of Employing Printers and Lithographers is an organization of presidents of printing and lithographing associations in Canada formed to serve as a clearing house for major printing and litho problems in that country.

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Dexter Elects Heintzemann

George A. Heintzemann has been elected president of Dexter Folder Co., Pearl River, N. Y., succeeding James A. Gilbert, who has resigned to become board chairman. Mr. Heintzemann, who became executive vice president of the company two years ago, has served the company in various capacities for 23 years. He originally hails from Boston, and his father, Carl H. Heintzemann, is remembered in trade circles as one of the leading printers in New England. Mr. Heintzemann's headquarters will remain at Pearl River while Mr. Gilbert, in connection with his work as chairman of the board, will move his offices to the company's New York City address at 330 West 42nd Street.

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ATF Names Brophy

Joseph A. Brophy, president of J. P. Brophy & Co., Elizabeth, N. J., has been elected a member of the board of directors of American Type Founders, Inc., at the regular annual meeting of stockholders last month. Following the stockholders meeting, Thomas Roy Jones was reelected president of the company. Others reelected were Edward G. Williams, executive vice-president; James A. Coleman, secretary and treasurer, George S. Tiernan, assistant secretary and assistant treasurer; and Victor J. Olearo, comptroller. Theodore J. Kauffeld has been appointed Manager of Products, a position formerly held by H. I. Lewis, who has resigned.

THEODORE J. KAUFFELD
. . . new ATF Manager of Products

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Elect Cosby President

Charles R. Cosby, executive secretary of the Label Manufacturers' National Association, New York, was elected president of the Trade Association Executives in New York City last month. Trade Association Executives is an organization composed of representatives of trade associations operating in the metropolitan area. At its annual meeting last month the principal subject of discussion was industrial cooperation in step with government plans for national defense.

•

New Howard Flint Ink Plant

Howard Flint Ink Co., Detroit, has announced the formal opening of its newest ink factory located at Houston, Texas. The new Howard Flint plant will serve the graphic arts industries in the southwestern part of the United States.

Vulcan Names Croke

Vulcan Proofing Co., Brooklyn, announces the appointment of Allan B. Croke Co., of Boston, as distributor for its line of Vulcan offset blankets and rollers in New England.

•

"Living Lithography" Exhibit

"Living Lithography" is the title and the theme announced for an all-industry exhibit scheduled to take place during the month of October, occupying the entire building of the Philadelphia Art Alliance, 251 South 18th Street, Philadelphia, Pa. Sponsored by The Philadelphia Art Alliance in collaboration with the Lithographers National Association, New York, the objectives of the exhibition have been announced by John F. Lewis, Jr., Art Alliance president, to be as follows:

> " . . . to honor the tremendous recent strides made by lithography as a commercial technique, and to foreshadow its future development, technically and artistically. To provide for the general public, for the lithographic industry and for its clientele, a comprehensive view of recent accomplishments in the field, in a way that will effectively dramatize these accomplishments and bring them to the broadest public notice . . . "

Maurice Saunders, chairman of the board, Lithographers National Association, is chairman of the Honorary General Committee; Herbert Hosking, member of the Art Alliance executive committee, is general chairman for the event. While attention will be given to the history and tradition of lithography, in the major part of the exhibit emphasis will be laid upon the accomplishments of modern American "living" lithography as applied to the merchandising, marketing, advertising and general graphic arts problems of American business. Actual specimens of such lithographic material will be collected from the lithographic producers of the country.

ENLIST

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Frank O. Sullivan Dies

Frank O. Sullivan, 69, of Roselle Park, N. J., a pioneer in offset lithography, died last month. He had his own lithographic business in Cleveland before he retired and moved to New Jersey in 1932. Mr. Sullivan often lectured on lithography at colleges, and was a former member of the Roselle Park Board of Education. He is survived by three sons.

•

Drug Act in Full Force July 1

All sections of the Federal Food, Drug and Cosmetic Act, including those whose enforcement was postponed by the Lea Amendment, became effective on July 1st. Under regulations of the new act, all foods, drugs and cosmetics shipped in interstate commerce must be clearly labeled with the name and address of the manufacturer or distributor and the net contents on the principal label or on a supplementary label directly adjacent to the principal label. This is the case regardless of the date when the packages or the labels were actually manufactured, it was pointed out.

In a recent inquiry regarding the application of the Federal Food, Drug and Cosmetic Act to packages shipped for display purposes, administrators of the Federal act pointed out that if a package shipped in interstate commerce is one that will ultimately be used by the consignee for display purposes, then all the information required by the law to appear upon the label must also appear on the package. If, however, it was added, the shipping package is merely a container for the protection of the goods through transportation and which will be discarded by the consignee upon receipt of the goods, then it is not considered necessary that the information required by the Federal act appear upon the label.

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Artist's Suit Dismissed

Lithographie St. Laurent, Ltd., Montreal, Canada, was named defendant recently in a suit for $108,820 brought by a Miss Alice Pelodeau, artist and author, charging that she suffered $100,000 damage to her reputation because the defendant, according to the allegation, made a defective lithograph from one of her drawings. The suit was dismissed by the court on grounds that the plaintiff failed to prove her claim.

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Course Draws Wide Attendance

When the third intensive course in the Fundamentals of Lithography, sponsored by the Lithographic Technical Foundation, New York, got under way July 1st at the New York Trade School, fifteen students were enrolled representing every corner of the North American continent. For nine weeks they will be instructed in the fundamentals of photography as applied to lithography, color correction, plate making, stripping and offset press work. Classroom instruction will be supplemented by visits to selected lithographing, paper, ink and equipment manufacturing plants. Lectures by outstanding technical men in the industry also constitute an important part of the course.

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Join Craftsmen Ranks

The Chicago Club of Printing House Craftsmen has accepted applications for membership from seven representatives of five lithographing concerns. They are as follows:

M. R. De Tolve, president, Central Envelope and Litho Co.; Edward J. Chalifoux, secretary-treasurer, Photopress, Inc.; W. J. Mitchell, superintendent, Protectu Bank Note Corp.; Wm. Pinkas, pressroom foreman, Protectu Bank Note Corp.; Joseph Pavesich, foreman, camera dept., Edwards & Deutsch Litho. Co.; Arthur Scholz, pressroom foreman, Workman Mfg. Co.; and Thos. J. McLaughlin, Kelly press foreman, Workman Mfg. Co.

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American Decal Expands

American Decalcomania Co., Chicago, has started construction of an addition to its plant at 4326 W. Fifth Ave. The addition will be 50 x 125 feet in size, and will be one story high and cost $15,000. It will house a new R. Hoe & Co. direct rotary litho press and other equipment required to handle increasing business.

A.N.P.A. Hears Dickinson

Widespread production of newspapers by the offset process is foreseen by C. W. Dickinson, manager of the offset press department of R. Hoe & Co. Speaking at the 14th mechanical conference of the American Newspaper Publishers Association in Chicago last month, Mr. Dickinson predicted that "although the web fed offset press is comparatively new, it will in the next five years become common."

"Offset lithography," he said, "dates only from 1906 but in less than forty years it has done more to develop markets for printed products than letterpress has accomplished in 500 years." When the first Hoe offset press was developed, he remarked, it was thought that the potential market was limited to some 800 lithographers then in business. "Today," he said, "approximately 3,000 offset presses of all sizes and types are in use and there are any number of big letterpress printers who have more offset equipment than equipment for letterpress."

James H. Gregory, representing the Webendorfer-Wills division of American Type Founders, Inc., followed Mr. Dickinson on the program with a review of experiences of the two daily newspapers and sixteen country weeklies now using Webendorfer offset presses. J. B. Webendorfer, vice president of the organization, came from Mt. Vernon, N. Y., to assist Mr. Gregory and representatives of E. G. Ryan & Co., Chicago agents, at the Webendorfer booth.

The conference gave Rapid Roller Co., Chicago, opportunity to present to the trade for the first time, its newly developed "Mercury Speedway" roller for highspeed newspaper and other presses. Burdett Mfg. Co., Chicago, exhibited a new device utilizing the heat from infra-red light rays for ink drying on presses of all types. Among the other fifty-five exhibitors who carry lines that serve the lithographer were the following: Samuel Bingham's Son Mfg. Co.; Chemco Photoproducts Co.; Eastman Kodak Co.; Ideal Roller Co.; Harold M. Pitman Co.; Vandercook & Sons.

Plans for NAPL Convention in September Taking Shape

PLANS for the 8th annual convention of the National Association of Photo-Lithographers, to be held at the Palmer House, Chicago, September 26 to 28, are rapidly being completed, according to advance information released early this month by Walter E. Soderstrom, executive secretary. Among the program features which have already been arranged are a series of clinics in practical photo-lith procedure for keymen in lithographic plants who are registered at the convention, to be conducted by the Chicago School of Printing and Lithography; an address by A. J. Fay, National Process Co., New York, on "What Charging for Over-runs Has Meant to Our Company;" and a paper by J. D. Smith, Jr., Photo-Reproduction Corp., New York, entitled "What Constitutes a Reasonable Delivery Service?" An exhibit of advertising literature sent out during the past year by NAPL members to its customers and prospects will be held. William A. Krueger, of W. A. Krueger Co., Milwaukee, is in charge of the exhibit and all lithographers are invited to send him samples of advertising pieces which they would like displayed.

W. A. KRUEGER, JR.
. . . in charge of direct mail exhibits.

William Arthur Clark, cost accountant, will deliver at the convention a report of the recent cost survey which he conducted among lithographic plants in the east. He will also present the standard cost system of the National Association of Photo-Lithographers which has been established under his guidance. As in the past, equipment and supply manufacturers will exhibit at the convention. Registration for the three-day session will be $7.50 which includes all of the sessions and the annual banquet. However, a special registration fee of $5.00 is being offered to those firms who send in reservations before September 14th. On the last day of the convention, which is Saturday, the customary "share-your-knowledge" clinic will be held. Firms registered at the convention will be assessed $1.00 each for each key man present. For those not registered, the cost of attendance at the "share-your-knowledge" clinic will be $2.00 each.

Further plans for the convention are being formulated by a committee of Chicago lithographers composed of C. V. Stucko, Rapid Copy Service Co.; W. A. Krueger, Jr., W. A. Krueger Co.; Miss Jessie M. Kehoe and Mrs. M. K. Lau, both of Kehoe & Lau, Inc.; and S. Edwin Earle, Northern Lithographing Co.

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Charles R. Sherman has been appointed sales promotion manager in charge of job black and color ink sales of Geo. H. Morrill Company, New York, division of General Printing Ink Corporation. He joined the company several years ago as assistant New York district manager and was then promoted to district manager at St. Louis.

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Credit for another outstanding civic deed in St. Louis again goes to John S. Swift, president of John S. Swift Co. of that city. Mr. Swift has supplied 150,000 silver maple seedling trees to the school children of St. Louis and St. Louis County, and announced cash prizes for the best growth recorded by fall. The total award will be $100, distributed among a number of children.

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Arkansas Printing & Lithographing Co., Little Rock, Ark., has purchased for $50,000 the two-story building which it occupies at 1000 Center Street, that city. Walter Guy is president of the lithographing concern.

MISS JESSIE M. KEHOE

MRS. MILDRED K. LAU

. . . members of the program and arrangements committee.

Celebrates 38th Year

Fort Wayne Printing Co., Fort Wayne, Ind., is celebrating its 38th anniversary in business this month, and is marking the occasion by winding up the final stages of an intensive sales promotion campaign begun six months ago when W. Herbert Roberts, formerly with Magill-Weinsheimer, Chicago, assumed the presidency of the company. On July 10th, the company officially marked the 38th year by holding a convention of its salesmen. Thirty-eight candles were lighted on a ten-foot birthday cake. Each candle represented a year in the life of the company and indicated that each of the company's salesmen had produced, since the beginning of the campaign, 38 orders each. It had been agreed beforehand that not until after this was accomplished would the huge cake be lighted. Attention was called to the birthday celebration by advertisements in the local newspapers. These are being reprinted as blotters and distributed by the company's representatives. Labels on packages leaving the company's shipping room and specially-designed letterheads also call attention to the anniversary. Following the candle-lighting ceremony, the company was host at a dinner given for its board of directors and stockholders in the redecorated ball room of the Hotel Anthony in Fort Wayne.

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Milwaukee Club Elects

Victor Schwarze, Krus Engraving Co., Milwaukee, Wis., was elected vice-president of the Milwaukee-Racine Club of Printing House Craftsmen last month. John E. Cobb, Western Printing & Lithographing Co., Racine, Wis., was elected recording secretary and Andrew B. Fries of the same concern was named treasurer.

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Metal Litho Honored

Metal lithography was given recognition at the fourteenth annual exhibition of fine design in Chicago printing, sponsored by the Chicago Society of Typographic Arts last month. One of the fourteen capital awards conferred by the judges was for a metal sign produced for a brewing concern by the American Can Co. The design was made by Henry Harringer. Also, among the 145 printed products selected from several hundred entries for display at the Newberry Library exhibition were two tin containers for a Chicago meat packer, also lithographed by American Can Co. after designs by Ernest A. Spuehler. Among other winners of the fourteen primary awards were two lithographed folders entered by R. R. Donnelley & Sons, Co.

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Chicago Club Elects Hagen

Chicago Club of Printing House Craftsmen "swung to offset" in selecting a new president to head the organization during the coming year. Jack L. Hagen, who was the unanimous choice at the election on June 18, is production manager of Workman Mfg. Co., an outstanding Chicago lithographing concern.

Gradie Oakes, who was elected 1st vice president, is president of Process Rubber Plate Co., and a pioneer in development of rubber printing plates. For 2nd vice president the Craftsmen elected Arthur W. Brooks, production manager for American Colortype Company's Chicago plant.

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Announce Max Schmidt Awards

The Max Schmidt Memorial Award for posters, sponsored by Schmidt Lithographing Co., San Francisco, will be made at the P.A.C.A. convention held in Vancouver this year. Awards of $200 for first prize, $50 for second and $25 for third prize will be given. Open to all western artists, the Max Schmidt Memorial awards are granted for finished art work used in actual advertising campaigns.

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New IPI Movie

Interchemical Corp., New York, has just released this month an all-color sound movie entitled, "More Than Meets the Eye," which describes the importance, both in industry and in daily living, of chemical coatings such as printing inks, industrial finishes, etc. The new movie is available for showing to manufacturers, associations and other interested groups.

Tax Law Clarified

At the request of the Associated Printers & Lithographers of St. Louis, the Missouri State Sales Tax Department has clarified the application of the sales tax law with respect to business done for advertising agencies, on which there has been no clear understanding among the printers.

The department holds that the agency should be billed for the sales tax wherever the printing is billed to the agency for resale to its client, unless the agency has filed tax returns with the department and remits the taxes due. Where the agency merely places the order and the invoice is sent direct to the advertiser, the advertiser is held to be the user and should be billed for the tax.

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Chicago Student Wins Award

Richard Dassow, a second-year student at the Chicago School of Printing & Lithography, won the first prize of $10.00 offered by the Chicago Club of Printing House Craftsmen for the best letterhead design to be used by the Chicago Club during 1940 and 1941.

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Heads Evans-Winter-Hebb

Arthur W. Winter, formerly vice president of Evans-Winter-Hebb, Inc., Detroit, was elected president of the corporation to succeed the late George K. Hebb at a meeting of the board of directors held last month. William F. Mason, formerly secretary and treasurer, was elected vice-president and treasurer, and Charles E. Behymer, Mr. Winter's former assistant, was elected secretary. Linton A. Belles remains assistant secretary and assistant treasurer.

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Dosie & Johnson Move

Dosie & Johnson Co., photolithographers of Milwaukee, have moved to a new plant at 263 East State Street in that city.

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Sales Training Booklet

Tradeways, Inc., New York, has just published a booklet entitled "Training Men to Sell" by William H. Lough, president of Tradeways. The booklet is available on request free of charge.

A Letter to the Editor

Sir:

After reading your story on the *Hartford Newsdaily* in the May issue, we would like to indicate to you by the attached sample of our paper what progress has been made in our effort to provide what we believe is the first full-fledged newspaper in the country produced by photo-lithography as a community weekly. While we may have passed up some bets—it is hardly possible for humans to bat 1000 in every circumstance—the reaction to our efforts against daily newspaper competition indicates that we have at least rung the bell to a satisfactory extent.

Like most small city newspapers, our income is derived principally from our job-work and the newspaper is just another job, which pays its way through advertising and serves as a most invaluable medium of advertising our business.

That there is a future for photo-lithography, even in cities and towns under 10,000, may be evidenced by the fact that we had to move from quarters that we believed would be adequate for at least two years in a little over one, and have had to add new equipment so rapidly that much of our income has gone there and we are, as owners, thus not yet able to start piling up our first million in salaries and savings, although our plant is increasing consistently in value.

We have hesitated to write articles, although many have been requested by various trade publications, about our progress, because we have not felt that we were yet authorities on this business. And having seen the products of many others attempting to establish photo-lithography in the newspaper field, we realize that there are few, if any, authorities.

We trust you will find our newspaper product interesting, and hope you will also study it with the thought in mind that it is still a newspaper and therefore cannot comply with the higher standards which must be set by our job printing department, but must be turned out with a maximum of speed and a minimum of expense the while that profitable jobs are being rolled through the shop.

Very sincerely,

Hugh H. Soper, Editor, Co-Publisher
The Steel County Photo News
Owatonna, Minn.

The Steele County

Phone 2534
News, Pictures, Office Supplies Printing

Photo News

The First Photo-Lithographic Newspaper in th

Official Paper of the County of Steele and ... of Medford

Volume 1 — Owatonna, Minnesota, Friday, May 31, 1940 — Number 10

PLAY HOSTS TO GROUPS FROM FOUR PARISHES

PN Photophoto

Many Receive Honors at High School's Senior Class Day and Award Program Monday; Schmidt, Miss Buxton Leaders

John Schmidt received the American Legion medal for outstanding citizenship, including scholastic endeavor, extra-curricular effort and citizenship, at the hands of Past Commander James E. Kidd of the Owatonna American Legion as the Owatonna high school held its annual award day in connection with the school's senior class day program Monday. Miss Patricia Buxton was awarded the American Legion Auxiliary similarly granted to the outstanding girl by Mrs. William E. Dunker, past president of the Owatonna Legion Auxiliary.

Membership in the National Honor society, based on scholastic effort and citizenship went to Donetta Beaumont, Patricia Buxton, James Doyle, Delores Grass, Jean Hosfield, Richard Jik, Gertrude Kubicek, Eleanor Malikow, Harriet Michaels, John Schmidt, Victor Tiennino, Helen Weavrin and Donna Wood. Leadership in athletics, coupled with scholarship, brought National Athletic Scholarship society membership awards to James Chesney, Eugene Grass, Chris Haid, Donald Haug, Leonard Hedahl, Richard Jik, Ferris Jones, Le Roy Mack, William Sauter, John Stransky, Allan Torgerson and Harvey Williams.

Mary Jean and Mary Edith Zambon, twins, shared the Business and Professional Women's club award for the outstanding sophomore girl, the first time the honor has been divided, as it was presented by Miss Margaret Deininger, past president of the club. The gold citizenship award of the Owatonna chapter, Daughters of the American Revolution, was presented to Miss Jean Hosfield by Mrs. James E. Raine, chapter regent. I. O. Amundson presented the Staunch & Lomb honorary science award to Marvin Gottarek.

The Josten class awards for leadership in four phases of student activity were presented by L. B. Humes to James Lewison, junior, athletics; Jean Hosfield, James Chesney and Robert Peterson, senior, dramatics; Carolyn Nelson, Jean Nelson and Allan Torgerson, juniors, music; Kay Whelan and Richard Hammel, scholarship. Group awards were presented to scores of other students.

Those included: Journalism — Truman Anderson, Marie Bedney, Steve Goff, Richard Jik, Harriet Michaels, Audrey Partridge, Shirley Rosebrock, Ida Voss. Music — Full orchestra for honor rating in regional contest. Wayne Coleman — Honor rating in regional contest for French horn solo. Three years of music technique — Clement Schroeder, Dorothy Twitchell, Bernice Ringhofer. Two years — Wayne Coleman. One year — Audrey Arndt, Donna Arndt, Norma Arndt, Virginia Fait, Frances Garman, Richard Jik, Leighton Mantler, Peggy Nelson, Charles Buxton, Richard Bernhard, Farris Jones, Shirley Ohlin, Ada Christenson, Betty Habberstad, Tom Stenhjemdal.

Commercial — Delores Grass, Marcella Beede, Ann Wodarczak, Virginia Bjorkker, Joan Romer, Barbara Walbert. Girls Athletic association — Letters, Patricia Barth, Margery Robinson, Phyllis Snyder, emblems, Bobbe Josten, Dolores Dack, Mary T. Chadman, Marie Torgerson, Shirley Rosebrock, Betty Tollefson.

Athletic — Football — Ed Norman, Bob Martin, Chris Haid, Carroll Hansen, Sidney Kliemmer, Robert Chesney, Harvey Williams, Robert Brick, Clifford Jarchow, Leonard Hedahl, Robert Seyfert, Ralph Bailey, Merlon Head, Jerome Dugna, Joe Barroff, Wencil Wallert, Donald Sauer, McIndoe Alexander, Gunnar Hald, James Chesney, Robert Evans, Ralph Beneke, Jerome Hartle, Cleit Barta, Le Roy Mack, John Soulek. Basketball — Carroll Hansen, Robert Seyfors, James Lewison, Ed Norman, Charles Buxton, William Sauter, Robert Brick, McIndoe Alexander, Richard Evans, Allen Torgerson.

Baseball — Robert Evans, Donald Haug, John Stransky, Donald Sieser, Allan Torgerson, Richard Jik, Joseph Barron, Richard Evans, Ferris Jones, Eugene Grass, Clarence Watson, Track — Ralph Beneke, Le Roy Mack, Donald Hansen, Charles Buxton, Alvin Poland, Lloyd Bowman, Bruce Wilson, McIndoe Alexander, Tony Jackovich, James Lewison, Geff Ferris Jones, Dean Ditlevson, Jack Ebeling, Vincent Cashman, Laverne Dunker, Tennis — John Schmidt, William Sauter, Kenneth Kamholz, Phillip Winship.

Social science extra-curricular activity entertainment speech — Delores Grass, Charlotte Lusk, Eleanor Malikow, Harriet Michaels.

Class day features of the program included a skit presenting the class prophecy by Robert Evans and Robert Peterson, and the class history, given in song by the boys' octet.

WASECA RITES FOR MRS. TOBIN

Funeral services for Mrs. T. J. Tobin, mother of Mrs. L. B. Kahnke of this city, were held at the Sacred Heart church in Waseca Monday morning, the Rev. Father Tracior officiating. Burial was made at Waseca. Mrs. Tobin died at the home of her daughter at 304 South Oak street Saturday morning, following a paralytic stroke which took place about a week before.

A well known resident of the Waseca community, Mrs. Tobin is survived by her daughter here and two sons, Leonard and Clifford, both of Waseca.

New Officers Named by Junior Chamber

—Privett photo photo

CHARLES I. GORDON was chosen to succeed Douglas Kraft as president of the Owatonna Junior Chamber of Commerce as the unit held its annual meeting here last week. Richard Lusk was named first vice president, Robert Anderson, second vice president, Dr. John H. Schoen Jr., secretary, and Clarence La Rose, treasurer. Chosen as members of the board of directors were David McWethy, Glenn Claussen and Paul Jurgensen. Robert R. Barnard, David Bickford and Floyd Anderson are members of the board whose terms do not expire until next year.

Mesdames Charles Blazek and Byron Prestegard were hostesses to the Aurora Lutheran ladies aid society in the church parlors Wednesday afternoon.

FOLK HERE ARE INVITED TO P. A. BACCALAUREATE

Owatonna and Steele county folk are being especially invited in an announcement made by Headmaster George R. Strayer of Pillsbury Academy, to the Academy's annual baccalaureate service, which will be held at the First Baptist church at eight o'clock Friday evening. Musical features and the baccalaureate sermon by Dr. Sidney W. Powell pastor of the First Baptist church of St. Paul, will mark the program. The former will be directed by Arthur W. Johnson, head of the Pillsbury department of music, as organist and director of music. The program:

Organ prelude, "Festival March" (Gullmant); processional, "March Pontificale" (Gounod); Hymn No. 56; invocation, the Rev. W. L. Robertson; Scripture reading, the Rev. J. E. Rains; anthem, "Father, Whate'er of Earthly Bliss" (Mason), the cadet octet; prayer, the Rev. Miles O. Wolfe; baritone solo, "Just for Today" (Seaver); Cadet Robert Bailey; baccalaureate sermon, Dr. Powell; benediction, the Rev. Mr. Wolfe; "Recessional March" (Whiting).

Two events last week honored Miss Pranova Nichiporuk, who will be a June bride. Mrs. Raymond Johnson, Miss Dolphine Malek and Miss Harriet Axtell were hon'r last week Wednesday evening at a shower at the Johnson home of 203 East School street. A mock wedding was the principal feature of the evening's entertainment. Forty relatives and friends attended another shower Thursday afternoon, given by Mesdames William Maerke and Earl Bopp at the home of Mrs. Richards.

Mrs. Alfred Ballstadt entertained the A. G. M. club at her home Tuesday afternoon. A paper on "How to Make the Most of Your Refrigerator" was presented by Mrs. Emory Loudenmilk.

FORMER OWATONNA GIRL IS WEDDED IN SYRACUSE, N. Y.

The wedding of Miss Adelaide M. Hondl of this city, and John Blum of Syracuse, N. Y., took place at St. Mary's church in Brandord, Conn., Monday morning, May 20. Announcement of the wedding was received here early this week. They are making their home in Brandord, where Mr. Blum is employed.

LIONS NEW CHIEFS TAKE POSTS—WITH LAUGHTER

PN Photophotos

Officers of the Owatonna Lions club were installed with a bit of ceremony and somewhat of comedy as the Lions and their Lionesses held their spring dinner dance at the Owatonna Country club last week Wednesday evening. The officers of the club are shown in the upper photo, left to right: President W. W. St. Clair, First Vice Pres. Julius H. Meyer, Second Vice Pres. D. H. Dewey, Tail Twister Irvin H. Rosa, Lion Tamer George R. Strayer, Secy.-Treas. Walter H. Mertz and Song Leader James W. Lyden.

"Because his neck he wears a yellow ribbon" the second picture Past Pres. P. Keen Young invesing Pres. St. Clair with his "badge of office."

The C. J. club met at the home of Miss Mildred Hinton Tuesday evening with Miss Mary Joan Chamiaski as assisting hostess. Games were played, Miss Ann Jorth and Miss Hazel Starch winning prizes.

selling today calls for much more than the ability to make a trick approach or put the heat on a customer. That's why *Helping People Buy* is not another book on selling. It starts where other books on salesmanship leave off. The author has pulled no punches. Some of the things he has to say about salesmen and their expense accounts will make the short hairs stand up on many a salesman's neck. But between its covers he has condensed the most important things a salesman can do to get ahead and presented them enlivened with anecdote and story that will make this book an enjoyable and thought-provoking experience for every man who sells and every man who directs salesmen. Eugene Whitmore, as editor of *Sales Management*, and now as editor of *American Business*, has interviewed most of the topnotch salesmen in America today. From an unusually rich experience, he has been able to put between the covers of this book, solid down-to-earth common sense.

NEW BOOKS

Helping People Buy by Eugene Whitmore. *Published by Dartnell Corp., Chicago. Price $2.50.*

The woods are full of books on selling. And if the knack of being a successful salesman could be boiled down into a ready-made formula which could be taken in daily doses, then good salesmen would be the rule and not the exception. But

Industrial Chemistry. *By E. R. Reigel. Published by Reinhold Publishing Corp., New York. Price $5.75*

For those who desire a better understanding of the materials with which they work, this book is especially recommended. It is not a "how-to-do-it" book for it contains no advice on practical, every-day procedure. It is primarily concerned with the chemical manufacturing processes among which are included paper-making, dye and pigment manufacture, printing inks, oils and resins, etc. Ten pages are devoted to a discussion of photographic and lithographic materials and procedure. The instruments and methods used in controlling manufacturing processes are discussed at great length. With the trend in lithographic circles bearing toward control and coordination of all departments, the latter chapter will prove of great value. Patent information, as well as a number of charts, tables and conversion factors, round out the information contained in this book.

NEW EQUIPMENT AND BULLETINS

Crystal Issues Idea Book

Crystal Mfg. Company, Chicago, has issued a 56-page book of display ideas, covering the fields of action displays, Brite-lite, changeable copy, Edgelite, electric clocks, convertible floor displays, fluorescent Glo-lite, counter, floor and illuminated merchandise displays, illuminated package displays, counter reminders, travel-ad displays, wall signs and window displays.

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New Morrill Folder

George H. Morrill Co., Division of General Printing Ink Corp., New York, has just issued another direct-mail folder in commemoration of its 100th anniversary, this year. The new folder, entitled "America's No. 1 Choice," shows reproductions of red, yellow, blue and black samples of Morr-Glos Inks.

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Announce "Analyte"

Color Analysts, Inc., manufacturerers of luminous daylight, Bloomfield, N. J., announce the development of "Analyte", a white light developed for the purpose of properly matching colors of all types of material and products under conditions requiring north sky light. The light from the new lamp is produced by gaseous discharge tubing, and since it is white at its source is said to require no corrective filters or fluorescent coatings. The tubing used in "Analyte" is bent in the form of a grid covering the entire area of the reflector surface. The grid is held in place by spring clips and is said to be easily removed and replaced. Mazda lumiline lamps are installed in the reflector and may be alternated, it is pointed out, with the daylight for comparative matching under artificial illumination. "Analyte" is said to be air cooled and insulated and to provide cool operation under steady and continuous operating conditions. Model J-201, now available, weighs 160 pounds, operates on a 115 volt 60 cycle alternating current, requires a line of 40 ampere capacity and consumes 1700 watts.

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Issues Research Papers

The United States Government Printing Office has just issued the following graphic arts papers: "Progress in Graphic Arts Research from the Viewpoint of the Government Printing Office", an address by the Public Printer delivered at the Carnegie Institute of Technology recently; "Humidity Standards for Paper Testing," a reprint of an article from *Paper Industry and Paper World;* and Technical Bulletin No. 2 on "Permanence and Durability of Paper." The latter publication contains abstracts of all the existing literature dealing with this subject in the hope that it may serve as a ready reference source to paper mills and individual investigators seeking a summary of information as a foundation for future exploration into the field.

New Seybold Stitcher

Seybold Division of Harris-Seybold-Potter Co., Dayton, Ohio, has just announced the new Morrison Side-Seam Stitching Machine designed for use in the manufacture of corrugated and solid fibre shipping containers. The new machine, it is claimed, will stitch corrugated or fibre boxes not smaller than 5x5 inches and not larger than 25 inches wide one side (size of the other side is unlimited; height of the box above 2½ inches is also unlimited). It is claimed that at standard speed, 290 RPM, the machine will stitch better than 200 five-stitched boxes per hour and 850 seventeen-stitched boxes, providing the operator can fold and feed into the machine at that rate.

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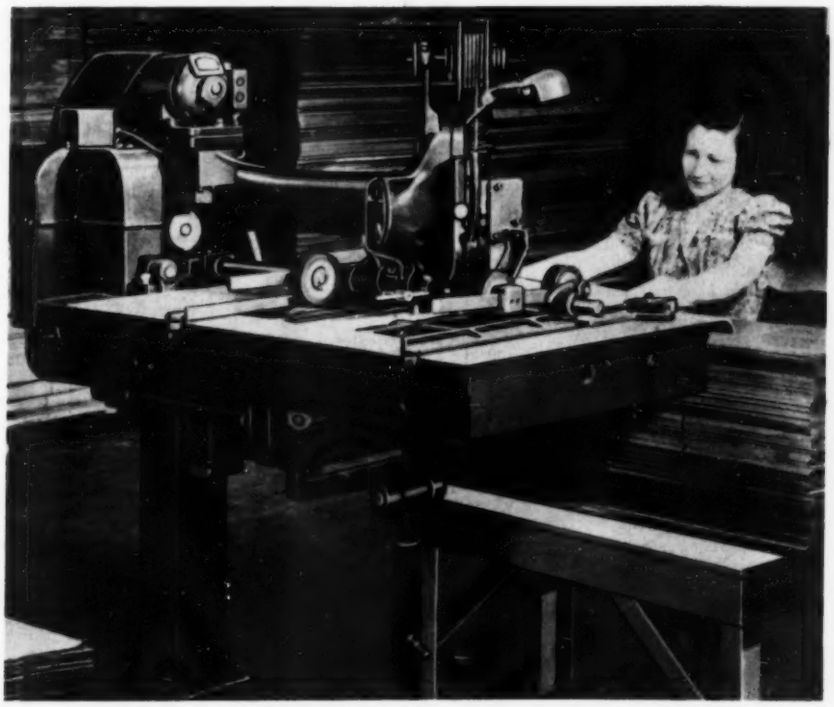
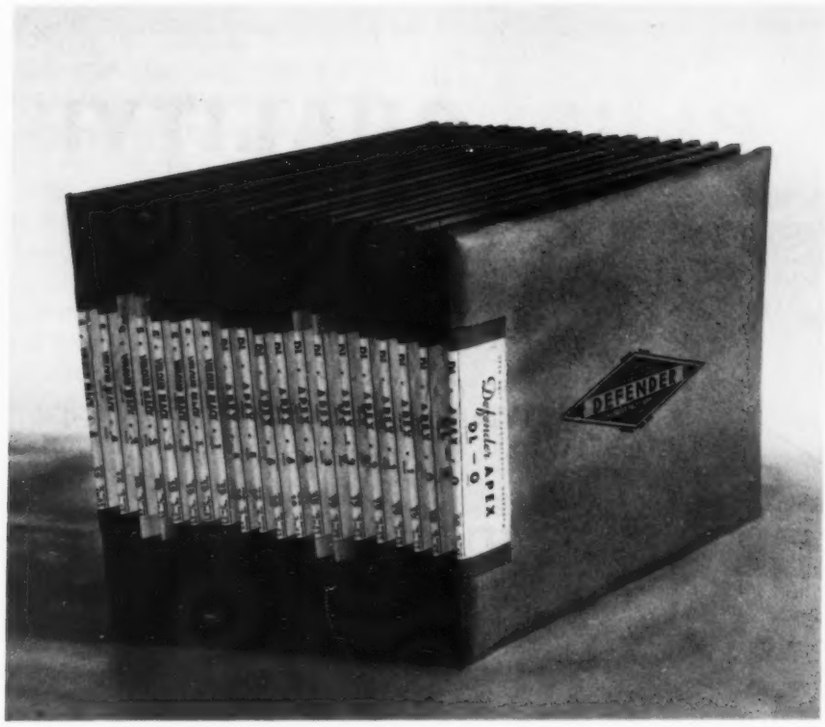
Rising Sample Books

Rising Paper Co., Housatonic, Mass., is distributing a new sample book showing specimens of its Rising Bond. The cover of the book shows an artist's streamlined rendering of the

New Seybold Stitcher





Defender Photo-Supply Co., Rochester, N. Y., has just labeled its complete line of Defender photographic paper packages. The new labels are designed with colored bands so that they may be easily identified in the darkroom and on the dealers' shelves.

Rising mills, while on the two back panels an aerial photograph of the mills, reproduced by offset lithography, is shown. The sample book is divided into three swatches, one showing white and ivory laid, another showing opaque, and the third showing white and ivory wove, as well as the five colors.

A letterhead portfolio on Rising Bond is also being distributed showing 10 different letterhead designs for the fictitious Barnett Manufacturing Company, ranging from the classical to the modern, and including examples reproduced by letterpress, offset lithography and die-stamping. The portfolio shows what can be done in the way of letterhead design with variations in type and treatment. According to R. B. Clark, Jr., advertising manager, the company has a series of pieces on Rising Bond going out on regular schedule for the balance of the year.

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Describes Ink Manufacture

International Printing Ink Corp., New York, is distributing a booklet entitled "Back of the Printed Word," a pictorial story which outlines the steps in the manufacture of modern printing inks. It contains 29 pages of black and white photographs depicting the many steps which go into formulating, producing and testing the variety of printing inks which the printing industry requires. Not designed to serve as a manual on how ink is made, the book is designed, rather, to give the reader an impression of the fundamental program of research and the manufactuing operations which are back of modern ink production.

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New Kidder Slitters

Kidder Press Co., Dover, N. H., has just issued a four-page folder illustrating and describing its complete line of slitters and roll winders. Complete information is given concerning the Super-Speed slitter and roll winder. Among the outstanding characteristics claimed by the manufacturer for this new shear-cut machine are rugged construction, which has eliminated vibration at high speed and permits operation at 2000 feet per minute on almost any type of paper; shelf-sharpening blades and quick width-change. Bulletin available on request.

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New Eclipse Catalog

Eclipse Airbrush Co., Newark, N. J., has just issued a new catalog of its complete line of spray equipment for both automatic and manual operation. Described as No. 77, the new catalog is available on request.

New IPI booklet outlines the steps in the manufacture of modern printing inks

Strathmore Broadside

Strathmore Paper Co., West Springfield, Mass., has just issued a giant broadside to 1500 merchant salesmen reprinting three representative insertions currently appearing in magazines advertising the Strathmore line. In the broadside are reproductions of the covers of the 22 magazines carrying the Strathmore 1940 advertising. Strathmore is also distributing a direct-mail piece on its Beau Brilliant paper, featuring "Gone With the Wind" style and atmosphere, and pieces showing specimens of Strathmore Book and Strathmore All-Rag Book. Both offset and letterpress have been used to print the various promotion pieces. Copies are available.

•

Folder on Gear Streaks

C. W. Latham, 6 Lafayette Avenue, New York, has just issued a folder entitled "Cause and Cure of Gear Streaks." The folder describes a method of eliminating variations in cylinder surfaces without dismantling the press or loss of production. Copies of the folder or further details may be obtained from Mr. Latham.

•

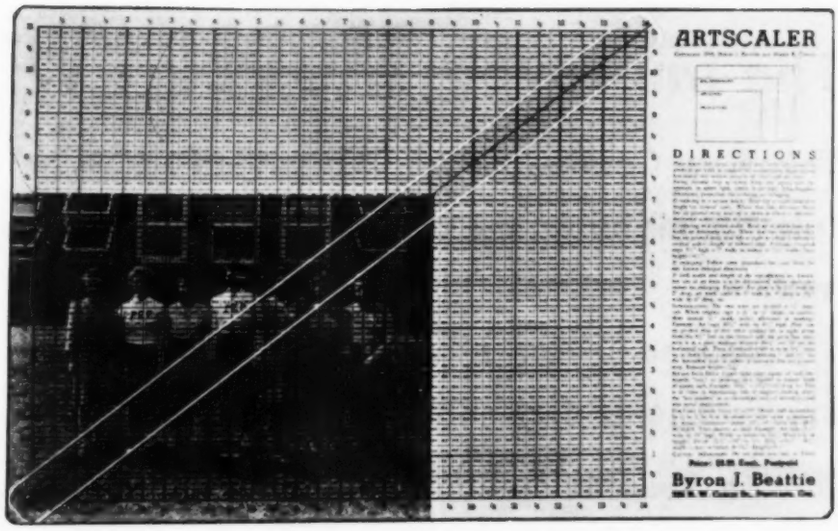
International Paper Folder

International Paper Co., New York, is distributing a lithographed direct-mail piece prepared for Remington Arms Co. showing the reproduction qualities of its 80 lb. white Lexington Offset, antique finish. The folder carries a photograph of Captain Bob Bartlett, famous adventurer and explorer, which was taken in the Arctic regions, and was enlarged from four-color process plates.

•

New Assembly Table

Fostoria Pressed Steel Corp., Fostoria, O., has just designed a table for assembling negatives, making up pages and checking register, for craftsmen in the lithographic and photo-engraving fields. Measuring 34″ x 48″, the table is equipped with a working surface consisting of a flashed opal glass panel 31″ x 36″ illuminated by two 30 watt 36″ fluorescent daylight tubes. The lighting is said to provide a cool diffused illumination over the entire working surface. Additional features include a flexible arm lighting unit for the top of the table and a tray at the front for equipment. All joints are welded to prevent swaying. It is furnished completely wired ready to be plugged into the lighting circuit.



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Art Scaler

Beattie & Hoffman, printers, Portland, Ore., announce the "Art Scaler," a new precision instrument for determining any desired degree of reduction or enlargement for art work or photos. Printed on heavy celluloid, the device measures copy up to 11″ x 14″ at ¼ inch intervals. Copy larger than 14 inches can be scaled by dividing each denomination by 3, etc., then proceeding as usual. An advantage claimed for the "Art Scaler" over other methods is the facility with which a photo can be cropped on four sides, measured and scaled in one operation, simply by placing it over the upper part of the picture to be reproduced. It is priced at $3.95.

The Seybold Division of Harris-Seybold-Potter Co., Dayton, O., has developed a precision knife grinding machine for paper cutter and similar beveled knives. It is said to accommodate a variety of sizes up to 6-inch widths for grinding. It is manufactured in three standard sizes, 70-inch, 100-inch and 128-inch lengths. The one shown, which illustrates how a paper knife may be conveniently clamped into position for grinding, is 100 inches in length.

New Agfa Repro-Lith Film

Agfa Ansco, Binghamton, N. Y., has just announced Agfa Repro-Lith Panchromatic film, a new emulsion designed to simplify the making of color separation negatives. The new Agfa film incorporates an emulsion of extremely high contrast, it is said, on an acetate base of .4066 thickness. The emulsion, it is also announced, is a balanced panchromatic type endowed with sensitivity to all colors of the spectrum and, therefore, suitable for use with any set of standard color separation filters. It is intended for both line and halftone negative making and requires 2/3 of the exposure used for Repro-Lith Ortho film when preparing line copy and only ½ exposure employed for halftones. The new film requires no special considerations, it is pointed out, and may be handled and developed in the conventional manner, with the exception, of course, of the necessary precautions of handling and developing in total darkness or in the illumination of a dark-green safelight.

•

Third PAC Talks Available

General Printing Ink Corp., New York, is distributing complete transcripts of the addresses given at the third Printing and Advertising Clinic entitled "Giving Voice to the Press," which was held at the GPI Galleries recently. Included are the talks given by Archie Burns, mechanical superintendent of the *New York Herald Tribune*, on "The Mechanics of Newsprinting;" Gilbert P. Farrar, typographic consultant, on "The Newspaper Format of Tomorrow;" Leonard Pinover, Intaglio Service Corp., on "Color Gravure in Newspapers;" and Austin Thomas, J. Walter Thompson Co., on "Newspaper Production from the Agency Angle." Copies are available on request.

•

Holds Open House

Webendorfer Division of American Type Founders, Inc., Elizabeth, N. J., has extended an invitation to magazine publishers, book publishers, lithographers and other interested in the lithographic process to visit the company's Mount Vernon plant to witness a demonstration of its web-fed perfecting book and magazine press which the company has specially installed for test purposes. Publishers and production men who care to do so by furnishing their own offset plates and paper are invited to make their own tests on the press. It carries a 35-inch web and lithographs both sides of the paper in one operation, delivering two 8-page or one 16-page magazine signature, folded and trimmed, at the rate of 10,000 to 14,000 an hour.

•

Develops New Display Lamps

Continental Lithograph Corp., Cleveland, has developed "Conti-Glo" Black Lights to provide ultra-violet ray sources for spot-lighting and flood-lighting large display areas. The lights have been designed to cause displays painted with fluorescent paints, inks and dyes to glow in the dark. Both portable models and models for permanent installation have been designed.

•

Announces New Developer

Philip A. Hunt Co., manufacturers of photographic materials for the graphic arts, Brooklyn, is distributing a folder describing its new Graph-O-Lith Developer for line and halftone negatives. Samples of the new product, for use with Orthochromatic and Panchromatic Process and Stripping Films, are available on request.

•

Strathmore at the N. Y. Fair

Strathmore Paper Co., West Springfield, Mass., is holding a special display at the World's Fair Offices At Work building at the New York World's Fair throughout the summer. A panel on the wall and a glass-inclosed case showing Strathmore papers and advertising are exhibited.

•

New Speed Variator Unit

General Electric Co., Schenectady, N. Y., has announced a Speed-Variator equipment unit designed for industrial applications where adjustable speed has a direct bearing on control of quality and efficient out-put of the driven machine. It operates on an alternating current source of supply, providing ranges of adjustable speed by means of generator voltage control. The equipment unit consists of an adjustable speed direct-current motor, an adjustable voltage motor generator set with control and a separately mounted generator field rheostat. Among the applications in mind by the designers were pumps, fans and printing presses.

•

New Wesel Catalog

Wesel Manufacturing Co., Scranton, Pa., manufacturers of tools and equipment for the graphic arts, has just published a new illustrated catalog with prices, describing its line of cameras, automatic vacuum printing frames, photo-composing machines, plate-cutting machines, proof presses and accessory equipment. Copies are available on request.

•

Lithos Record Forms

Northern Lithographing Co., Chicago, is lithographing forms for recording a statement of earnings and deductions for the employee's record. These forms, which are for sale, may be obtained by writing directly to the company, 1250 West Van Buren Street, Chicago. According to law each employer is required to give his employees a written statement of earnings and deductions made in a form suitable for permanent filing.

•

New Type Specimen Book

Rochester Athenaeum and Mechanics Institute, Rochester, N. Y., has just published as one of its projects a book of type specimens. The book contains samples of type faces composed by hand and machine at the Institute for the purpose of providing students and others with an aid in the selection of type faces, a device for copy fitting and layout work and a reference for available type faces. The book is divided into sections showing type set by hand from American, Monotype and Bauer faces and by machine on the Intertypes, Monotypes, Ludlow and All-Purpose Linotype.

•

George Murphy, Inc., New York, has just issued a complete catalog of photographic materials, complete with prices. Copies are available.

Setting the Inking Rollers

(*from page* 27)

gent, which may or may not be okay for the type of roller being used. This is something that every pressroom foreman should take up with the makers of the rollers being used. In fact some manufacturers specify the ink solvent to be used in conjunction with their rollers.

Because of long usage and general reaction from certain types of driers which set up oxidation, rollers may become too hard, or, on the other hand, react in the opposite direction and become soft and tacky. In that event, it can usually be taken for granted that the rollers have outlived their usefulness as a medium for feeding the lithographic image, and a new set of rollers is needed.

BECAUSE of the tendency for steel riders to strip or become bare when certain types of water fountain acid solutions are used, one roller manufacturer has come out with an ebonite roller to replace the steel riders on the offset press. Whether this ebonite roller will be generally adopted for this purpose time alone will tell. Meantime it is claimed by the manufacturer that this type of roller will not strip under the most drastic conditions. Stripping is usually the result of too high an acid content in the water fountain solution, and can generally be remedied by the use of pH control of the water fountain solution. It is advisable to use a pH value of approximately 3.8 for zinc and 4.6 for aluminum plates. If this condition should occur, the steel rollers should be treated with either a weak solution of nitric or sulphuric acid, or they can be treated with oleic acid and pumice powder.

If a comparatively fine deep grain is used in place of a coarse shallow grain for a general class of work, it will help considerably in both damping and inking on the offset press. We mention this because it is often overlooked when damping and inking problems come up in the offset pressroom.

Ink should never be allowed to dry on the surface of composition rollers, but if this accidentally happens, apply plenty of any ordinary cleaning fluid such as gasoline or benzine, and allow it to soak into the dried ink for some time, then rub lightly with rags saturated with the same cleaning fluid. It is not necessary to use great pressure in cleaning because of the density and the absence of porosity in the surface. Clean your rollers daily, especially the surface of the rollers near the ends. The use of short plates will cause ink to accumulate at the ends and if left there, will cause the roller to pit and disintegrate.

Rollers after extended use may become shiny and not carry and distribute the ink as satisfactorily as new rollers. In most instances the shiny surface has minute fine cracks, checks, hair-lines, etc., that extend a short distance into the surface. This shiny surface consists always of a dried film of ink which has been formed by allowing a little ink to dry on the surface after each cleaning. In the course of time this film may attain a thickness of as much as a few one-thousandths of an inch. This film is much harder than the roller surface and is, therefore, apt to crack in use or through contraction or expansion and this forms the fine cracks, checks, or hair lines that appear on the surface. The accumulation of this dried ink or oil film can always be avoided by proper washing and cleaning of the rollers after use. When the rollers are kept clean and free from this oil film, the surface will not crack or check and will retain its original tack and suction. If, however, an ink film is allowed to accumulate this film will eventually crack, and if not removed, the cracks will become so deep that they will affect the roller surface and will cause it to crack also. When this happens the roller becomes worthless.

When a new set of composition, or synthetic oil or rubber rollers are received in the pressroom, it is a good plan to allow them to season for a few days before they are put in use on the press. If this precaution is taken, longer life may be had from the rollers.

Have you renewed your subscription to M. L.? Better do it NOW!

Offset Paper at Work

(*from page* 34)

25½x30½ or 20½x24¾. If the order is for a large quantity he can get an odd-size sheet of Fourdrinier bristol easier than cylinder bristol, and thus get paper in which the grain adapts itself both to press requirements and the shape and character desired by his customer for the completed job.

One precaution must be observed. Not all printing bristols are properly sized for offset work. Some are likely to pick. Having assured oneself on this point the offset printer has the widest choice when specifying bristols.

IN one of our articles it was suggested that the offset printer was in a position to produce good book work, especially when a more durable book than can be made with ordinary, soft letterpress paper is indicated. The confirmation of this idea in actual practice came from an unexpected source.

The American Institute of Graphic Arts for the first time produced the 1940 catalog by offset. On the inside of the back cover this note is found: "The 1940 Fifty Books catalogue is printed by offset lithography, a recognition of the part this process is now playing in book production." It proceeds to explain the technique of offset printing briefly for the benefit of the uninitiated.

Furthermore, the catalogue itself reveals that eight of the "Fifty Books," has employed offset printing in whole or in part, this year. Those interested in further details are referred to this catalogue, which includes brand names and substance weights of the papers in each book. The publishers who made use of offset include, Little, Brown & Co., Houghton-Mifflin Co., Alfred A. Knopf, Inc., Random House, Ives Washburn, Inc., and Viking Press.

•

Rutherford Machinery Co. division, General Printing Ink Corp., New York is distributing a folder describing its line of Rutherford Vacuum Printing Frames. Copies available.

Pre-Testing the Display

(*from page* 25)

reach a just evaluation of display efficiency. This Photometric Analysis does. No one advantage, however strong, sweeps the camera and photo-electric cell off their feet. No advantage that might be of assistance is overlooked or slighted.

The last category of displays shown here is the multiple type. The quality, above all, that must be present is continuity, or else the group dissolves into separate units, operating independently, devoid of repetitive value and mass impact. Continuity, too, is extended to cover not only visual relationship to the product, but visual relationship to each other.

The pair of Kodak displays shows the second form of continuity, but little of the first. They are connected by color, mass, and other elements of design, but bear little relation to the product, even though the latter is included by illustration. This deprives them of a valuable sales-help, but leaves them otherwise a perfect example of this type of display.

Attention and interest are tied up with the die-cut and activated photographs shown, with product identity simultaneously conveyed with utility via the same route. Salesmanship suffers, and sponsorship leans too much upon a white letter against a light-toned ground for success. Continuity, as has been mentioned, is weak between product and display—even the name KODAK employs a style different from that upon the package—since there is no evidence of resemblance; the illustration is simply stuck on.

Visibility, therefore, is only fair. Legibility is poor. Integrity is good, except for the separation of base platform from the rest. It is apparent immediately that adjustment of the ground color would improve a number of qualities. As extra, 'plus' values, dealer help is the subject of one display and, presumably, seasonability is expressed by the photographic subject matter. These help to raise the total value as it will be reflected in possible sales.

These four types of displays are widely representative. Among them almost nine-tenths of the store material distributed will be found. These examples are neither the best nor the worst, simply random examples submitted to a partial analysis and the results placed on exhibition. In this analysis no complete numerical evaluation by point or percentage has been attempted in order not to become too complicated. The figures are available, however.

One fact should be kept in mind. The procedure of Photometric Analysis is purely objective. The camera and photo-electric cell, slide-rule and adding machine have neither pride nor prejudice. They record only visual facts. It is with their help that Photometric Analysis measures *visual efficiency*. This basic rule transcends theories and different points of view. The display that can be seen by more people has a chance to sell more people. The display that tells more about its product stands a better chance of creating interest in that product. Giving the most information to the largest audience, established by considering conditions affecting appearance and the qualities present in appearance, decides the efficiency of the display. That is just commonsense, which is just what Photometric Analysis applies to displays.

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New Competition?

(*from page* 33)

direction, it is possible to throw the dot formation sufficiently out of focus to break it up into a practically continuous tone without destroying the sharpness of the copy itself. This is possible since the original image was a continuous gradation of tone which, by means of the half tone screen, was converted into a dot formation and will again be converted back into a similar dot formation.

In making the new screen positive from the practically continuous tone negative, the screen is shifted to an angle of 30° with the original in order to avoid any moiré pattern. The screen angles in four color work then become:

	Original	*New Angle*
Yellow	90	30
Red	15	45
Blue	75	15
Black	45	75

It can be seen from the foregoing that competitive processes have not been idle but have used every means at their disposal to obtain maximum flexibility and quality. Wide spread adoption of such processes may well make lithographers look to their laurels. We have not been slow in our own development but we are perhaps overlooking possibilities of combining the advantages of other processes with our own.

We obtain a strength of shadow tone second only to gravure, but there is much to be desired in the shadow gradations and in the lightest tones. Our shadow strength is not due so much to the amount of ink carried as it is to the quality of the ink which can be used. If a lighter ink carried in greater quantity could be used, it would be possible to obtain the same shadow strength with better gradations in the shadows. Deep etch has done much to improve this condition but there is still room for improvement.

The very light tones have always been a major problem in printing. Highlights can be actually dropped out both in gravure and lithography but if lithography attempted to use inks sufficiently transparent to give good light tones, it would be impossible to obtain opacity in the shadows. Everything, then, points to some means of obtaining greater ink carrying capacity in the shadows in order to make possible the use of more transparent inks. That at the present time appears to be the next logical step in lithography's progress.

Who will make that step?

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Adds New Equipment

Dale & Friese Lithoplate Graining Service, Chicago, last month added a new M-H vertical plate coating machine to its equipment. J. H. Sweeney, Lanston Monotype Machine Co.'s Chicago manager, reports also the recent installation of an M-H photo composing machine in the plant of Gugler Lithographing Co., Milwaukee, and sales of M-H overhead color precision projection cameras to Garber Co., Ashland, O., Erie Lithographing Co., Erie, Pa., and Ralph Clark Stone, Toronto, Canada.

Offset Press Operation

(*from page* 37)

membering that a thick film can throw your adjustment off as much as two-thousandths. This film of ink should cover the entire surface of the bearer, so that when it comes in contact with the other bearer, you will have a check upon the accuracy of your bearers, whether they are perfectly round or not, and also you will be able to tell from the transfer of the ink from one bearer to the other, whether your bearer flat is deep enough.

After inking, slack off the cylinder adjustments a few points and throw the pressure on. Turn the press and see if there is any indication of ink transfer. If not, bring up the cylinder adjustments in small steps, turning the press between each step until transfer occurs. If it occurs upon one side before the other, bring up the other side only, until they are equal. Inspect all bearers for roundness, inspect bearer flats, and then add three more points for squeeze.

By now the combined squeeze between properly-set bearers and the excess squeeze between plate and blanket will have overloaded your motor, so remove the excess packing and see if the motor still labors. If it does, with a normal four-point blanket-squeeze then it is probably safe to remove a slight amount of the bearer squeeze.

We repeat, it is necessary to maintain greater bearer traction than blanket-plate traction at all times, and with the bearers set properly and no more than a four-point squeeze between plate and blanket, this is easily accomplished, but as soon as excess blanket squeeze pressure is allowed to occur, the traction will build up and may overcome bearer traction and cause trouble that is so hard to trace that almost anyone or anything may be blamed for the poor grade of work that will result.

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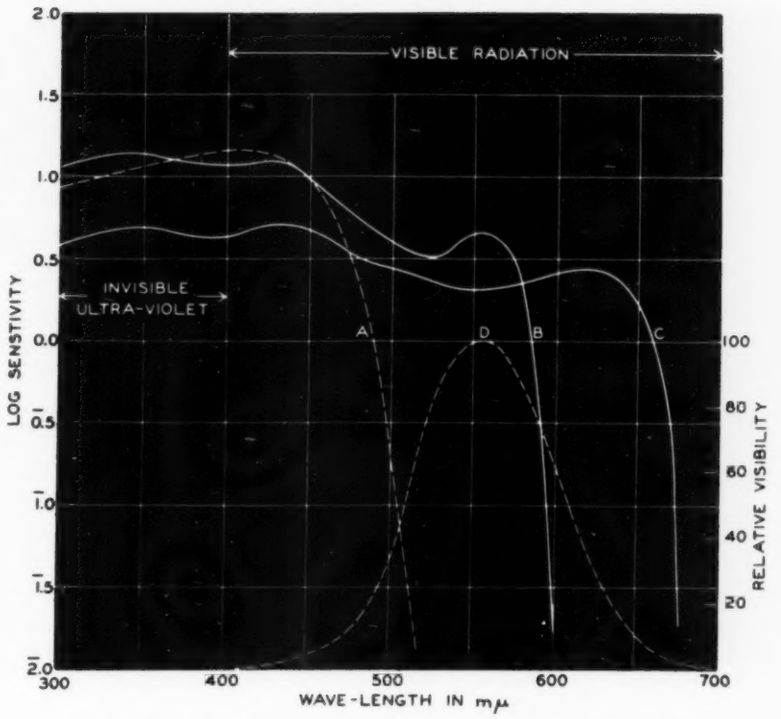
Technical News

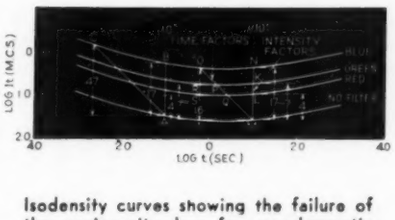
(*from page* 38)

red filter, 4. The gray scale was exposed with the red filter in the lens for 20, 40 and 80 seconds and the



Spectral sensitivity curves of ordinary or blue-sensitive material (A), orthochromatic material (B), and panchromatic emulsion (C) compared to the relative sensitivity of the eye (D)

negative developed. An inspection of the negative would show that a true match of the no-filter negative



Isodensity curves showing the failure of the reciprocity law for panchromatic film exposed to light of various colors

would be obtained between 40 and 80 seconds exposure so that the true filter factor under the conditions of use would be approximately 6 instead of 4.

(*Note.* This is perhaps an oversimplification of the method suggested in Mr. Tupper's article. For the mathematically minded, Mr. Tupper suggests that first the densities of the four scales, (the no-filter scale and the three red filter scales) be plotted against the logarithm of the exposure time (D-Log E). Then at any given density, say, .50, another curve should be made by plotting the differences in exposure against the logarithm of the exposure time (Delta log E—Log t). This latter curve will be a straight line and the correct exposure time will be found where the line crosses the (Delta log E=O abissa).

Dampener for Printing Presses. E. C. Grambecki (to Roberts & Porter, Inc.). *U. S. Patent No.* 2,196,412 (April 9, 1940).

MR. GRAMBECKI'S invention refers to a device designed to dampen the plate on a lithographic press by blowing a stream of moist air at the cylinder. The dampening solution is contained in a trough and a series of rapidly revolving disks dipping into this solution throw up a fine spray or mist of the dampening solution. This mist is caught in a current of air which passes through the revolving disks. This air is then directed uniformly over the length of the plate cylinder.

The specification also provides that the dampening device may be connected to the press by mechanical and electrical devices in such a way that it operates automatically in synchronization with the operation of the press.

LITHOGRAPHIC ABSTRACTS

Abstracts of important current articles, patents, and books, compiled by the Research Department of the Lithographic Technical Foundation, Inc. These abstracts represent statements made by the authors of articles abstracted, and do not express the opinions of the abstractors or of the Research Department. Mimeographed lists have been prepared of (1) Periodicals Abstracted by the Department to Lithographic Research, and (2) Books of Interest to Lithographers. Either list may be obtained for six cents, or both for ten cents in coin or U. S. stamps. Address the Department of Lithographic Research, University of Cincinnati, Cincinnati, Ohio.

Photography and Color Correction

Process of Making Half-Tone Images. E. E. Eckardt. *German Patent* No. 653,280. A process of making half-tone images is described which is called "Skeletype" or "Skelettierung" (literally skeletonizing) and which consists in causing the silver grains to aggregate into groups to form half-tone dots. This is done by repeated washing and drying before exposure. (*Monthly Abstract Bulletin of Eastman Kodak Company,* 26, 1940, p. 230).

The Necessity of Retouching in Monochrome Photolithography. F. J. Tritton. *Penrose Annual,* 42, 1940, pp. 130-2. The screen negative should not look like the corresponding continuous-tone negative, and it is unlikely for the normal methods of preparing screen negatives to yield exactly the negative required. This is at least one of the reasons why retouching in some form is necessary in photolithography, and shows that no automatic method of eliminating retouching in color lithography is likely to be achieved until this problem of correct monochrome production has been solved. As the screen negative is not a true reverse in visual appearance of the original, dot-reduction is easiest to carry out on the screen positive.

Process Practice. F. H. Smith. *Process Engravers' Monthly,* 47, No. 557, May 1940, pp. 168-9. Equations for determining magnification, camera extension, object distance, and the relationship between camera extension, object distance, and focal length of the lens are derived. An example showing how the expressions may be used in practice is given.

Screen Angles. J. S. Mertle. *Graphic Arts Monthly,* 12, No. 5, May 1940, pp. 46, 48, 50, 52, 54. Following a review of the work of Ives, Albert, and Kurtz on screen angles, the author states that (1) the various colors should usually be contained within 90°, (2) primary colors should be separated from each other (yellow excepted) by 30°, (3) the strongest color of the set should be made at an angle of 45°, and (4) tints should be made on the same angle as the corresponding primary color. Several sets of angles for three- and four-color work are given. The Cox-Hallam system of rotating the screen 60° between successive negatives is intended to overcome moiré caused by screens in which the two sets of rulings are not cemented together at exactly right angles.

A Color Chart for Photo-Offset Work. F. G. S. Cackett. *Penrose Annual,* 42, 1940, pp. 133-5, If color charts are made under working conditions before reproduction work is undertaken, using a set of selected color inks, they assist in the adoption of quantitative control of negatives, positives, and color correction. A description of a simple, practical color chart is given, and the making and use of the chart are outlined.

Stripping for Color. T. Stephenson. *Lithographers' Journal,* 25, No. 2, May 1940, pp. 63, 84. The following systems of stripping color negatives and positives are described in detail: (1) separating by opaquing, (2) the ink impression or glass method, (3) stripping on blueprint or transparent glass, (4) laying out the main color separation and using this as a key for stripping the other colors, and (5) stripping to a goldenrod ink impression. Layouts to be used in stripping color work on glass are illustrated.

Kokachrome in Lithography. W. Faulkner. *Lithographers' Journal,* 25, No 2, May 1940, pp. 62, 81. The structure and development of Kodachrome film are discussed briefly. In taking Kodachrome for reproduction purposes, the contrast should not be too high, and illumination should be of the proper color temperature. Either the direct or indirect methods of reproduction procedure may be used. Color correction is achieved by staining, dot-etching, or masking. In the Modern Masking Method contact positives of the proper density from the blue printer negative are bound in register over the red and yellow, preventing red and yellow from printing over the greens and blues.

Progress in Color. Anonymous. *British Journal of Photography,* 1940, 87, No. 4163, pp. 77-9; No. 4164, pp. 88-90; No. 4165, pp. 99-101; No. 4166, pp. 112-3; No. 4167, pp. 125-7; No. 4168, pp. 141-2; No. 4169, pp. 156-7; No. 4170, pp. 167-8; No. 4171, pp. 180-1; No. 4172, pp. 192-4. These installments conclude the second cycle of this survey of British patents on color photography. The following topics are discussed in connection with color rendering: (1) color improvement, (2) corrections derived from theory, (3) masking, (4) the black printer, (5) mathematical selection of the primaries, and (6) negative sensitivity at certain spectral regions. Information concerning sound tracks on color film, and on apparatus and optical systems for color photography is presented.

Planographic Printing Surfaces and Plate Preparation

Photo-Printing Surface. J. W. Cusden and H. E. Dawson. *British*

Patent No. 518,662. This invention outlines the production of a printing surface by employing a gelatine-bromide coating which will yield a positive upon development (presumably by usual positive reversal development), fixing and washing and then treating the gelatine so that the developed image is more or less insoluble, in relation to the amount of exposure. Several forms of bleaching-hardening bath are given, and after treatment in one of these the films are ready for printing in collotype fashion. (*Process Engravers' Monthly*, 47, No. 557, May 1940, p. 170).

Printing Plate and Method of Making Same. J. D. Kreis (to Bonnar-Vawter Fanform Co., Inc.). *U. S. Patent* No. 2,200,363 (May 14, 1940). The method of making printing plates which comprises intimately commingling rubber and a metal powder, placing a thin layer of such mixture over a sheet of rubber, causing the mixture to adhere to the rubber sheet by curing them together, forming on the surface of the plate an image adapted to receive and retain ink, and producing an amalgam on all portions of the plate not covered by said image.

To Produce Sensitized Metal. Anonymous. MODERN LITHOGRAPHY, 8, No. 5, May 1940, p. 83. A new high-speed sensitized metal sheet announced by Taylor-Sloane Corporation consists of a special non-ferrous alloy base coated with photographic emulsion. It is expected that its non-shrinking feature and excellent durability will make this product especially suitable for mapping, microfilm, color reproduction, and the like. Photographic progression is said to be the same as for photographic materials on the usual bases. It is claimed that this alloy is also suitable for offset press plates and is equal to stainless steel in durability on the press.

Making Albumin Plates for Long Runs. J. Stark. *Lithographers' Journal*, 25, No. 2, May 1940, pp. 65, 81, 87. In making durable photolitho plates, the acidity and density of the albumin solution must be carefully controlled. A pH of 5 to 5.8 is recommended. The correct exposure time for the prevailing relative humidity must be chosen. Successful development depends largely upon correct exposure. After the first etch, the plate should be gummed up, fanned dry, and rubbed up under gum water with a good rubbing-up ink. It is then fanned dry, dusted with 75% French chalk and 25% powdered resin, cleaned, gummed up, and fanned dry. Fountain solution of pH 4.6 for aluminum and of 3.8 for zinc are recommended.

Equipment and Materials

Densitometers and Their Use. L. Dutton. *American Annual of Photography*, 54: 45-64, 1940. The practical applications of densitometer readings are as follows: (1) finding the relative printing exposures of a series of negatives, (2) measuring the contrast of negatives to choose the paper contrast, (3) controlling the negative contrast to suit various printing media, (4) determining whether or not negative exposures are correct, (5) controlling exposures where the volume of work is great, (6) determining the quality of emulsions and the suitability of a given film for its purpose, (7) determining and controlling correct development, and (8) balancing negatives for color work, or any other work where accuracy is important. In addition to a discussion of these applications, the construction of a home-made densitometer is described. (*Monthly Abstract Bulletin of Eastman Kodak Company*, 26, 1940, p. 191.)

Practical Color Photography: Building a Densitometer. W. Perelstrus. *Camera* (Philadelphia), 59: 461-64, December, 1939. The densitometer described in the article is very similar to that described by Warner (Ibid. 59: 256-58, October, 1939). It is based on the method of comparing a known with an unknown value, using an exposure meter as the measuring device. A lamp is mounted in a suitable box. The exposure meter is mounted on a movable arm so as to fall over an aperture in the top of the box. Each step of a calibrated density wedge is read to get meter readings equivalent to density. Negative readings are made in terms of meter readings, converted to density from the calibrated table, and from those readings the actual exposure time is calculated. (*Monthly Abstract Bulletin of Eastman Kodak Company*, 26, 1940, p. 203.)

The Eastman Color Temperature Meter. R. F. W. Selman. *Penrose Annual*, 42, 1940, pp. 121-4. Color temperature can be regarded as the measure of the relative amounts of blue and red in the light, the proportion of blue increasing with increasing color temperature. On Kodachrome Type B film, balanced for a color temperature of 3200° K., a difference of about 100° K. can be detected. To prepare color transparencies of uniformly high quality, some means of measuring and controlling the color quality of studio lamps is necessary. The principle, operation, and calibration of the Eastman Color Temperature Meter is described and illustrated. Adjustment of the light source to the required color temperature is accomplished by means of Eastman Color Compensating Filters.

Paper and Ink

The Measurability of Printing Quality (of Paper). Warren Beazley. *Pulp and Paper Magazine of Canada*, 41, pp. 20-6, 117-22 (1940). A theoretical discussion dealing with the effect of smoothness (presenting several objections to present-day methods of measuring smoothness), oil-absorbency and wettability to oil. (*Chemical Abstracts*, 34, No. 9, May 10, 1940, p. 3087).

Color-Printing and Gloss-Coating Paper Products. R. C. Savoye. *Industrial Finishing*, 16, No. 5, pp. 53-4, 56 (1940). A discussion of hard-drying inks, gloss-ink vehicles, inks containing 2-3% of chlorinated rubber, over-print varnishes, spirit varnishes and water-white gloss paper lacquer. (*Chemical Abstracts*, 34, No. 10, May 20, 1940, p. 3519.)

Pigmented Bases. Binney Smith and Company. *British Patent* No. 517,640. This invention relates to the preparation of pigmented bases for use in the manufacture of lacquers, varnishes, printing inks, etc., for dis-

persing the pigment in an essential medium. (*British and Colonial Printer and Stationer*, 126, No. 604 May 16, 1940, p. 318.)

Are You Sure It's the Paper? C. W. Latham. MODERN LITHOGRAPHY 8, No. 5, May 1940, pp. 45, 48, 75. Paper is blamed for many troubles caused by excess pressure, tacky blanket, and other lithographic faults. Paper when ordered should be suitable for offset, should lie flat and not have wavy edges, and must have one of the long edges cut perfectly straight. If paper meeting the above specifications is received and trouble still occurs, the lithographer should make sure: (1) that the paper is kept flat in a place that will not cause drying out of the edges; (2) that it is thoroughly seasoned to a moisture content 1% above a balance with pressroom humidity, and kept that way; (3) that the press stops, guides, and grippers are set perfectly; (4) that the back cylinder pressure is not excessive; and (5) that inks or blankets are not too tacky.

Cellulose Derivatives as Printing Ink Raw Materials. Anonymous. *American Ink Maker*, 18, No. 5, May 1940, pp. 27, 29. The production, properties, and applicability to the printing ink industry of nitro-cellulose, ethyl cellulose, benzyl cellulose, methyl cellulose, cellulose acetate, cellulose acetobutyrate, and cellulose acetopropionate are discussed.

Printing Inks, Their Chemistry and Technology. (Book). C. Ellis. Reinhold Publishing Corp. 560 pp. $7.00. This comprehensive and well-illustrated volume presents detailed information on the history of printing inks, printing ink vehicles, driers, printing ink modifiers, pigments, typographic inks (drying-oil types), typographic inks (mineral-oil and quick-drying), planographic inks, intaglio inks, photomechanical preparation of matrices, transfer inks, emulsion inks, special types of printing inks, printing inks for miscellaneous purposes, printing ink problems, the testing of printing inks, and paper for printing. (The book is well documented and is an excellent survey of the literature rather than a discussion of current practice. There is little or no attempt to differentiate between methods proposed but never adopted, obsolete methods, and methods of practical value.—Abstractor.)

General

Color Synthesis in Trichromatic Printing. J. Bekk. *Penrose Annual*, 42, 1940, pp. 125-9. In half-tone color printing the color-synthesis is in effect subtractive, even in those parts of the image where dots of different color are juxtaposed. Colors resulting from the dots of the successive printings differ according to their being more or less juxtaposed or superposed. These differences are not caused by the joint action of the two forms of color-synthesis, but by the fact that the spectral reflectance of trichromatic inks is not ideal. These color differences belong to the phenomena that make true color-rendering unattainable without subjecting the half-tone plates to corrections, but their effect is of secondary importance compared with other imperfections of the half-tone color-printing process.

Air Is a Basic Commodity—Handle It with Care. R. T. Williams. *National Lithographer*, 47, No. 5, May 1940, pp. 16-8, 21, 56. Charts show the atmospheric requirements in various departments of a litho plant, the change in sensitivity of a bichromated colloid with relation to change in atmospheric humidity, the change in moisture content of paper with changes in surrounding relative humidity, and the time rate of change in paper with change in relative humidity. Complete air conditioning involves control of temperature, humidity and ventilation. The operation of and results obtained with a simple head-type of humidifier, a partial dew point control system, and a complete dew point control system are explained.

Lithographic Production in Hot Weather. I. H. Sayre. *Midwestern Lithographer*, 5, No. 1, May 1940, pp. 9-10, 12. With the rise of relative humidity in summer, albumin scum, "thickening", and "walking" often occur. These troubles can be overcome to a large extent by precision measurement and workmanship. Relation of albumin to bichromate should be kept constant by use of a hydrometer, and whirler speed, fan, and heater should be standardized. Humidity must be accurately determined by the use of a hygrometer, and exposures adjusted thereto. Wet and dry bulb, sling, and hair hygrometers are discussed, and directions for their correct use are given.

Miscellaneous

The Hartford Newsdaily is Fast Leaving Its Troubles Behind. Anonymous. MODERN LITHOGRAPHY, 8, No. 5, May 1940, pp. 55-9, 85. An account of the technique used by the Hartford Newsdaily, and of its progress up to the present time is given. Offset was chosen because it does a good job economically on half-tones. The press and equipment can be used not only for newspaper work, but also for any other offset work desired. Linotype composition, cellophane proofs on a Vandercook machine, 133-line half-tones, 36-pound newsprint paper, and ink at 70 cents a pound are used. Trouble has been encountered in regraining plates due to inability to straighten sharply crimped edges. It is claimed that, on this work, offset gives a 25% saving over letterpress.

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Forms New Direct Mail Firm

Advertisers Production Service has been recently launched as a new direct mail advertising concern in Chicago. R. W. Lambert and A. M. Zaritzky are partners in the new business. Letterpress work will be handled at the company's downtown office at 342 South Dearborn St., while lithographic work will be done by the Excello Press, 3334 West Franklin Blvd.

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Rival Poster Receives Award

Central Printing & Lithographing Co., Chicago, lithographed the 24-sheet poster which recently won a special award in the Chicago Federated Advertising Club's annual contest for outstanding campaigns in Chicago in various media. The poster was for Rival dog food. In the same contest R. R. Donnelley & Sons received a special award in the direct mail class for the consistency and effective presentation of campaigns developed for their clients.

"WHERE-TO-BUY-IT"

NOTE: This is a classified list of the companies which advertise regularly in MODERN LITHOGRAPHY. It will aid you in locating advertisements of equipment, materials or services in which you are particularly interested. Refer to the Advertiser's Index, on page 67 for page numbers. *"Say you saw it in Modern Lithography."*

CHEMICALS

Agfa-Ansco Corp.
Eastman Kodak Co.
Harris-Seybold-Potter Co.
Philip A. Hunt Co.
Litho Chemical & Supply Co.
Mallinckrodt Chemical Works
Norman-Willets Co.
Harold M. Pitman Co.
Senefelder Co., Inc.
J. M. & G. B. Siebold, Inc.
Sinclair and Valentine Co.
E. T. Sullebarger Co.
Techno-Chemical Products Co., Inc.

GRAINING AND REGRAINING

(Zinc, Aluminum, Glass and Multilith Plates)

Fuchs & Lang Mfg. Co., Div. General Printing Corp.
International Printing Ink Div. of Interchemical Corp.
Litho Plate Graining Co. of America, Inc.
Reliable Litho Plate Graining Co.
The Senefelder Co., Inc.
Standard Litho Graining Co.

GRAINING AND REGRAINING MATERIALS

International Printing Ink Div. of Interchemical Corp.
The Senefelder Co., Inc.
J. H. & G. B. Siebold, Inc.

INKS—(Varnishes and Dryers)

Crescent Ink & Color Co. of Penna.
Martin Driscoll & Co.
Howard Flint Ink Co.
Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp.
Gaetjens, Berger & Wirth, Inc.
International Printing Ink Div. of Interchemical Corp.
E. J. Kelly Ink Co.
George H. Morrill Co. Div. General Printing Ink Corp.
F. G. Okie, Inc.
H. D. Roosen Co.
The Senefelder Co., Inc.
J. H. & G. B. Siebold, Inc.
Sinclair & Carroll Co.
Sinclair and Valentine Co.

MISCELLANEOUS

Russell Ernest Baum (Folding Machy.)
Ralph C. Coxhead Corp. (Composing Machines)
Ben Day, Inc. (Shading Medium)
Dexter Folder Co. (Folding Machy.)
Leiman Bros., Inc. (Vacuum Pumps)

PAPER

The Martin Cantine Co.
Chillicothe Paper Co.
Hammermill Paper Co.
Mid-States Gummed Paper Co.
Sorg Paper Co.
Strathmore Paper Co.
West Virginia Pulp & Paper Co.
Whiting-Plover Paper Co.

PHOTO DRY PLATES AND FILMS

Agfa Ansco Corp.
G. Cramer Dry Plate Co. (Photo Dry Plates)
Eastman Kodak Co.
Hammer Dry Plate & Film Co.
Norman-Willets Co.
Harold M. Pitman Co.

PLATE MAKING EQUIPMENT & SUPPLIES

Aluminum Co. of America (Aluminum Plates)
American Type Founders Sales Corp.
Artists Supply Co. (Opaque)
California Ink Co., Inc.
The Douthitt Corp.
Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp.
C. P. Goerz American Optical Co. (Lenses)
Illinois Zinc Co. (Zinc Plates)
William Korn, Inc. (Litho Crayon and Litho Crayon Paper Pencil Mfrs.)
Lanston Monotype Machine Co.
Litho Equipment & Supply Co.
Macbeth Arc Lamp Co. (Arc and Printing Lamps)
National Carbon Co., Inc. (Carbons)
Norman-Willets Co.
F. G. Okie, Inc. (Opaques—Developing Inks)
Harold M. Pitman & Co.
Rutherford Machinery Co., Div. General Printing Ink Corp.
The Senefelder Co., Inc.
Simplex Specialty Co., Inc. (Film Dryers)
E. T. Sullebarger Co.

PLATE MAKING SERVICES

Baker Reproduction Co.
Modern Litho Plate Co.

PRESSROOM EQUIPMENT & SUPPLIES

American Type Founders Sales Corp. (Presses—Offset Spray Gun, etc.)
Bingham Brothers Co. (Rollers, etc.)
Sam'l Bingham Son Mfg. Co. (Rollers)
Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp.
Godfrey Roller Co. (Dampening Rollers).
Harris-Seybold-Potter Co. (Presses)
R. Hoe & Co., Inc. (Presses—Offset and Metal Decorating)
Ideal Roller & Mfg. Co. (Rollers)
International Press Cleaners & Mfg. Co. (Press Cleaner)
International Printing Ink Div. of Interchemical Corp.
Kimble Electric Co. (Motors)
Harold M. Pitman Co.
Rapid Roller Co. (Rollers and Blankets)
The Rathbun & Bird Co., Inc. (Machinists)
Roberts & Porter, Inc.
The Senefelder Co., Inc.
J. H. & G. B. Siebold, Inc.
Sinclair and Valentine Co. (Blankets)
Steelitho Plate Corp. (Blanket Cleaner, Steel Plates, etc.)
E. T. Sullebarger Co.
W. A. Taylor & Co., Inc. (pH Control for Fountain Solutions)
Vulcan Proofing Co. (Rollers and Blankets)

CLASSIFIED

All classified advertisements will be charged for at the rate of ten cents per word. $2.00 minimum, except those of individuals seeking employment, where the rate is five cents per word, $1.00 minimum. Address all replies to Classified Advertisements with Box Number, care of Modern Lithography, 254 W. 31st St., New York. **Closing date: 1st of month.**

Position Wanted:

Metal lithography supervisor with thorough knowledge of entire business from layout to finished product, including cans, caps, boxes, toys, novelties, etc. 25 years supervision experience. Address Box #584.

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Plate Graining:

Send your zinc and aluminum plates to BELL for prompt, efficient and satisfactory graining. Bell Litho Plate Graining Co., 6611 Vine Vale Ave., Bell, Calif.

•

For Sale:

One Steel Vacuum Frame, 48 x 72, with pump and motor, also double arc lamp with rheostats. Good condition. Address C. H. Haynes, 150 Nassau Street, New York City.

•

For Sale:

25½" x 133-line Levy Standard screen with holder, excellent condition, $475.00. E. T. Sullebarger, 538 South Clark, Chicago, Ill.

•

Manufacturer Wanted:

Canadian printer and lithographer would like to contact Christmas Greeting Card manufacturer with view to exclusive use of designs for reprinting in Canada. Address Box #576.

•

Wanted:

We want to buy a 64", or larger, Varnishing Machine. Write giving full particulars. Address Box #577.

•

Position Wanted:

Young man, competent black and white photographer, would like opportunity to learn halftone and color. Fast learner with a natural instinct for photography. Working at present. Will change only if real opportunity is presented. New York preferred. Address Box #578.

•

Situation Wanted:

Editor daily offset newspaper, 31, desires better connection. Willing tackle new venture. Develop, print pictures. Address Box #579.

•

For Sale:

Two color 41 x 54 G. T. Harris Offset, complete with D. C. motor and control, fine condition, can be seen in operation, located in New York City. Address Box #580.

•

Position Wanted

Photographer, 15 years commercial, illustrative, Kodachrome and one-shot color experience. If necessary can also provide complete modern studio equipment for installation of photo department in organization. Address Box #583.

•

Situation Wanted:

Really competent cameraman and platemaker, accustomed to quality work; an experienced and capable shop foreman; desires connection with progressive concern. Address Box #582.

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General Information Concerning Inventions and Patents:

A reference book for inventors and manufacturers, also containing sections on the registration of trademarks and copyrights, and a "Schedule of Government and Attorneys' Fees"—sent free on request. Simply ask for "booklet" and "fee schedule." Lancaster, Allwine & Rommel, Registered, Patent and Trade-Mark Attorneys, 402 Bowen Building, Washington, D. C.

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Interest Rates Held Too High

Acting on complaints by some Chicago printers and lithographers that they are forced to pay excessive rates on borrowed money, the Chicago Graphic Arts Federation has launched an investigation of printers' financing problems. Commenting on the situation, S. F. Beatty, Federation secretary, declares that since the Illinois Unemployment Compensation Act went into effect requiring printers to make quarterly payments of this tax, working capital has been reduced and printers and lithographers are finding it increasingly difficult to pay bills promptly. This, he said, is reflected in the increasing volume of accounts receivable carried on books of supply houses. Banks refuse to loan money on printers' chief assets, machinery and equipment, and in order to operate many printers are compelled to obtain money from finance companies on short term loans or by discounting accounts receivable, he added. Mr. Beatty is currently canvassing Chicago printers and lithographers for information and suggestions for a corrective program.

•

Harris Presses to China

Harris-Seybold-Potter Co., Cleveland, through its far-east representative, California Ink Co., San Francisco, has just shipped three single-color, 35 x 45 offset presses for installation in lithographing concerns in Hong Kong, China.

•

Installs Coating Machine

Advertising Metal Display Co., Chicago, has installed a new Rutherford coating machine, to be used for decorating metal products with lacquers, varnish or paint. It will supplement the company's silk screen and lithographing equipment.

•

Newsdaily Suspends

The *Hartford Newsdaily,* offset newspaper of Hartford, Conn., has suspended publication until the first week of September this year, according to a statement released this month by Bice Clemow, president and treasurer. The acute situation engendered by the war in Europe is given as the reason for suspension of the paper's activities for the present. Although the *Newsdaily* itself is not being published, the Newsdaily plant is producing the Cranston, R. I. *News Graphic,* another offset newspaper, as well as other job work.

Plan Big Celebration Dinner

Chicago graphic arts craftsmen are planning an elaborate public dinner as the culminating feature of their activities commemorating the 500th anniversary of the invention of printing from movable type by Johann Gutenberg. The affair, scheduled for the night of Sept. 17, will be attended by civic, religious and industrial leaders, according to Douglas C. McMurtie, chairman of the Anniversary Committee for the International Association of Printing House Craftsmen.

A current feature of the Chicago celebration is an exhibit of rare specimens of the printing art at the Newberry Library. Drawn from the store of treasures amassed by the John M. Wing Foundation, this display traces the development of printing from the earliest known piece of printing, a Buddhist charm from a Japanese woodblock, dated 770 A. D., down to products of modern presses. At the International Craftsmen Association's district conference in Chicago recently Mr. McMurtie presented an illustrated lecture on the history of printing, at which time committees were organized for the September dinner meeting.

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New "Since 1852"

Volume 1, No. 4 of "Since 1852", house magazine of Sorg Paper Co., Middletown, Ohio, has just been received. The new issue of "Since 1852" might well have Travel-America as its theme since it is devoted to beautiful scenic reproductions of popular travel spots in the U. S. A. Reproductions in Duotone of scenes typical of the New England countryside, upper New York State, New York City, the Pocono Mountains, Great Smoky Mountains, Minnesota's lakes, Niagara Falls, Yellowstone National Park, the National Park of Utah, Monterey Bay in California, Fort Ticonderoga and others are shown. The book is printed on Sorg's Equator Offset 25 x 38-120 (wove). Readers are invited to write to Sorg for a series of scenic pictures suitable for framing, printed on Sorg Equator Offset by the photo-gelatin process. The pictures are designed to show the process and to set forth the color effects available.

ADVERTISERS' INDEX

JULY, 1940

For Product Classification See Page 64

(The Advertisers' Index has been carefully checked but no responsibility can be assumed for any omission.)

New Walker Report

Walker Engraving Corp., New York, has just issued Research Report No. 5 in its current series on photographic reproduction preferences of *U. S. Camera* readers. In reply to the question, "Who is your choice for outstanding black and white photographer?" an overwhelming majority of the readers voted for Edward Steichen. Second preference was for Edward Weston and third was for Margaret Bourke-White. In reply to the question, "Who is your choice for outstanding color photographer?" the majority voted for Paul Outerbridge. Ivan Dmitri was second and Anton Bruehl third. In reply to the question, "Of all the advertising literature you have received lately, which piece did you like best?" the readers showed a preference for the advertising of Eastman Kodak Co. In reply to the question, "What particular sport would you like to see portrayed completely in a fine photographic volume?" skiing received the largest vote. In reply to the question, "What particular science would you like to see portrayed?" the preferences were for chemistry. In reply to the question, "What hobby?" the preference of the readers was for photography.

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F & L Names Pingree

Fuchs & Lang Mfg. Co., division of General Printing Ink Corp., New York, announces the appointment of Arthur M. Pingree as Cleveland District Manager. Mr. Pingree formerly was Pacific Coast Manager for F. & L., and prior to that he was District Manager in New York State and Canada. He has spent the greater part of his life in the lithographic industry, having owned and managed his own plants.

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Lithographs Unusual Booklet

National Process Co., New York, recently lithographed a unique booklet for Anaconda Wire and Cable Co., designed to facilitate recommendations and serve as a check chart for adequate wiring. The success of a wall chart which National Process had lithographed earlier as a sight reference prompted the publishing of the booklet.

When color counts . . . . count on

REPROLITH

ORTHOCHROMATIC

and

ORTHOCHROMATIC THIN-BASE

Here's the film you need for colored copy . . the universal film for line and half-tone work, bringing an extra margin of quality, plus:

1. **High color sensitivity.**
2. **Maximum contrast.**
3. **Greatest resolving power.**
4. **Extra latitude in development.**
5. **Anti-halation coating.**
6. **Safety base.**
7. **Dependable uniformity.**

FOR BEST RESULTS USE BEST MATERIALS

Agfa Ansco, Binghamton, N. Y. Made in U.S.A.

Agfa

Quality IS IN THE PRESS

You can't get it any other Way - - -

LITHO · CHEMICALS

• Through research Harris has developed and standardized new chemicals for both deep etch and surface plate making processes. Full details upon request. Write us with reference to your lithographic problems.

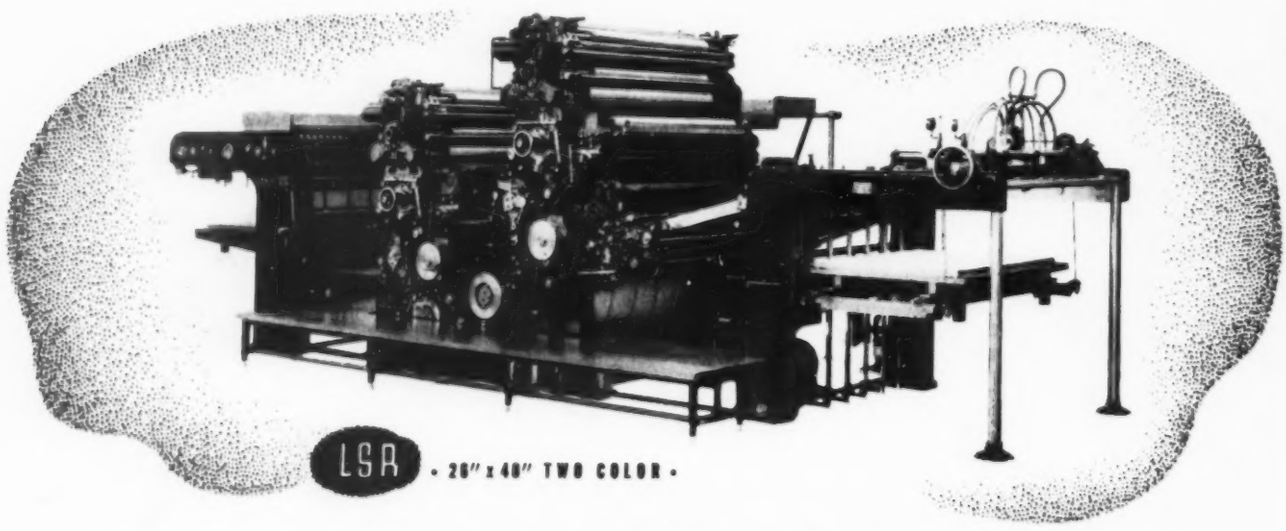
HARRIS SERVICE

• Nation wide—offers to all Harris users the full benefits of all Harris experience.

• It may cost a little more to build a press as Harris does—with quality materials, from more exacting designs, out of longer experience—but you can't expect quality Offset in any other way.

Harris Presses are offered for use only after Harris engineers can go no further in improving press quality.

The pioneer builders of successful Offset presses provide a complete line—a size and type for every Offset need.



HARRIS OFFSET PRESSES

HARRIS · SEYBOLD · POTTER · COMPANY

General Offices: 4510 East 71st Street, Cleveland, Ohio • *Harris Sales Offices:* New York, 330 West 42nd Street • Chicago, 343 South Dearborn Street • Dayton, 819 Washington Street • Atlanta (Harris-Seybold Sales Corp.), 120 Spring Street, N. W. • San Francisco, 420 Market Street • *Factories:* Cleveland, Dayton.